

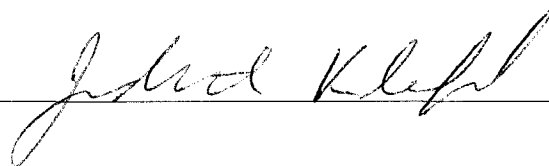
ADOPH MURIE: DENALI S WILDERNESS CONSCIENCE

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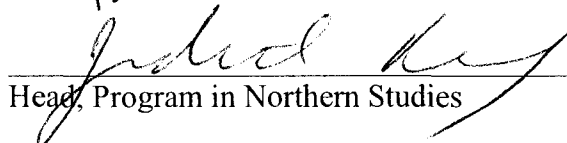
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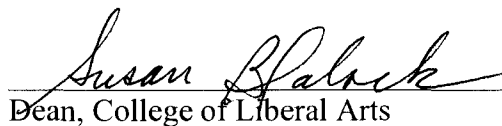


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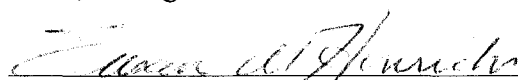


Head, Program in Northern Studies


APPROVED:



Dean, College of Liberal Arts



Dean of the Graduate School



Date



ADOLPH MURIE: DENALI'S WILDERNESS CONSCIENCE

A  
THESIS

Presented to the Faculty  
Of the University of Alaska Fairbanks

in Partial Fulfillment of the Requirements  
for the Degree of

MASTER OF ARTS

By

Linda S. Franklin, B.S.

Fairbanks, Alaska

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## ABSTRACT

Denali National Park, Alaska substantially owes its stature as Alaska's premier wilderness park to Adolph Murie. Forty years after he retired as park biologist Murie still influences the perception and management of Denali National Park. Murie's development from childhood to esteemed scientist and wilderness advocate followed a linear progression. His rural upbringing under the tutelage of his older brother, Olaus Murie, cultivated his desire to be a biologist and his appreciation for wild places. His academic training in animal ecology solidified his belief that the management of natural areas must consider all species as essential and equally valuable. His pioneering wildlife studies as one of the National Park Service's first biologists changed national opinion. He led the opposition against plans for extensive construction and development in Denali National Park during the Mission 66 era. In doing so he left the imprint of his wilderness ethic on the park.

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## INTRODUCTION

**Murie's first trip to the park**

Adolph Murie first stepped off the train at McKinley Station in September 1922 at the age of 22, his first venture outside of his home state of Minnesota. He came to be his brother Olaus's research assistant on a long-term caribou study in Mount McKinley National Park<sup>1</sup> and other parts of Alaska. Olaus met him at the converted Tanana Valley Railroad car that served as the train station, and the two set off for Olaus's camp on the Savage River.<sup>2</sup> Their twenty-mile hike on the primitive pack trail started in the spruce and aspen trees along Hines Creek. The trees became fewer and smaller as they approached tree line while they walked up Jenny Creek toward the Savage River. They saw none of the large animals the young park was already known for, but a single grizzly bear print made a big impression on Adolph. He saw it as "a symbol, more poetic than seeing the bear himself."<sup>3</sup>

Though the park was founded five years earlier, it was not until the year prior to Adolph Murie's arrival that funds were available to hire the park's first employee: superintendent Harry Karstens. The park's

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<sup>1</sup> Mount McKinley National Park was founded in 1917. In 1980 the park was tripled in size and renamed Denali National Park and Preserve. Since Denali National Park was known as Mount McKinley National Park during Adolph Murie's life, that is what I call it when discussing the park during Murie's lifetime. In sections that discuss today's park, I refer to it as Denali National Park.

<sup>2</sup> William E. Brown, *Denali, Symbol of the Alaskan Wild: An Illustrated History of the Denali - Mount McKinley Region, Alaska* (Denali National Park: Alaska Natural History Association, 1993), 96.

<sup>3</sup> Adolph Murie, *The Grizzlies of Mount McKinley*, Scientific Monograph Series No. 14 (Washington, D.C.: National Park Service, 1981; reprint, Seattle: University of Washington Press, 1985), 1.

temporary headquarters was a rustic camp outside of the park proper, at the south end of the Riley Creek railroad bridge. It consisted of cabins, barns and kennels built from materials that Karstens had gathered from nearby homesteads and an abandoned railroad construction camp.<sup>4</sup> The Alaska Railroad's Riley Creek bridge had just been completed, allowing motorized access to McKinley Park for the first time.<sup>5</sup> The first seven tourists to McKinley Park arrived by train that year, the same year Adolph Murie arrived. It was a wild and undeveloped national park with hiking or horseback, or dog-sledding in the winter, the only choices for travel.

Public pressure for access into the park started immediately. Tour promoters wanted a road built into the park allowing concessionaires to give tours to those arriving by train. Adolph Murie met Alaska Road Commission surveyors marking the route for the future park road and saw construction of the road begin the next summer (1923). The road determined "the park's essential infrastructure that is still in use today" according to historian William Brown.<sup>6</sup> It remains the single park road and the park's controversial focal point. Though Murie lamented the coming park road when he first heard of it in 1922, he did not know he would become a pivotal figure in the park road's first access controversy nearly forty years later.

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<sup>4</sup> Brown, 131-132. The official park boundary was three miles west of McKinley Station in 1922.

<sup>5</sup> The Alaska Railroad from Seward to Fairbanks was useable in 1922, but not officially completed until 1923 when the bridge over the Tanana River at Nenana was completed. Before the bridge was finished passengers could take the train as far as Nenana, take a boat across the river, then board another train on the other side. In the winter railroad tracks laid across the river ice allowed trains to make the through trip.

<sup>6</sup> Brown, 169.

### A trip to Denali today

Though Denali National Park has been connected to the Alaska highway system since 1957, the Alaska Railroad still brings many of the park's visitors. Today when travelers step off the train at Denali Park in the summer they are greeted with a scene more akin to a suburban train station than a wilderness park. Close to 1000 people arrive by train each day - a crowd of people trying to figure out which of the fifty courtesy buses and vans to board. Most of them are going to hotel accommodations just outside of the park - the developed area lining the George Parks Highway one mile north of the park entrance. The area is locally known as Glitter Gulch and its name is an apt reflection of Alaska's gold rush days when slapdash construction with an eye on making a quick profit was the priority.

For most park visitors, it is not until they venture deeper into the park, usually on a park shuttle bus or tour bus, that the natural beauty of the area predominates rather than the human constructs of the park entrance. In 2002, over 255,000 people took bus trips along the park road that had its beginnings in the simple pack trail.<sup>7</sup> Many visitors travel at least as far as the Toklat River at Mile 53, a six-hour trip. The scenery is spectacular and all hope to see North America's highest mountain, called

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<sup>7</sup> There were 87,500 Visitor Transportation System passengers, 93,000 Tundra Wildlife Tours and 75,000 Denali Natural History Tours in 2002. "Visitor Use Statistics" provided by the National Park Service, Denali National Park and Preserve. The Park Service instituted a public bus system in 1972 and began restricting private traffic to only those with special permits. Generally to go beyond Savage River at Mile 14 one must take a tour or shuttle/VTS bus.

Denali or Mt. McKinley.<sup>8</sup> During the summer, it is visible about thirty percent of the time from several vantage points along the road. However, the opportunity for remarkable wildlife sightings may be the biggest reason the park is so popular. In a single bus trip there is a high likelihood that one will see caribou, Dall sheep, grizzly bears, and perhaps moose and wolves. Many national parks have interesting wildlife, but Denali has the distinction of having a far richer and diverse wildlife population. It is an intact wildlife community where all the original species still exist and no new species have been introduced. In addition, the wildlife at Denali is not hunted, fed or otherwise controlled by humans. Observing the wildlife in their natural setting makes visiting Denali a special and unique experience.

As one travels farther west along the park road deeper into the park many people experience an increasing sense of expansive wilderness. A survey in 1994 found that visitors highly valued the park's physical diversity and vastness along with the abundant wildlife in an undisturbed natural setting.<sup>9</sup> Most of what visitors see from their bus windows are the same untrammelled vistas that existed in Murie's earliest days at Mount McKinley National Park.

As each bus reaches the west side of Sable Pass (Mile 43) the driver usually points out "Murie's cabin" below on the East Fork River (appendix

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<sup>8</sup> Denali is one of the original aboriginal names for the mountain, meaning high one or great one. Gold prospectors named the mountain Mt. McKinley in the late 1800s after President William McKinley. Though the name of the park was changed in 1980 from Mt. McKinley to Denali, the name of the mountain officially remains Mt. McKinley. Most Alaskans favor the name Denali in honor of the area's Native heritage.

<sup>9</sup> Eugene Palka, *Valued Landscapes of the Far North* (Lanham, Maryland: Rowman and Littlefield Publishers, 2000), 101.

1 shows the location of key points along the park road). The bus drivers are not instructed to point out this landmark, or to tell Adolph Murie's story, but they do. They talk about Murie's pioneering wolf study and its lasting effects on wolves and the park. His biological work ensured that the wildlife and the entire ecosystem were protected in their natural condition. His insistence on keeping unneeded human intrusions out of the park, became the core of a newly emphasized wilderness philosophy for the park. The longer the association with Denali, whether as employee, photographer or repeat visitor, the more people realize the significance of Adolph Murie's legacy. Denali National Park would be a very different place today if Adolph Murie had not devoted much of his life to the park.

Murie is best known for his pioneering study of wolves from 1939 to 1941. His study allowed Denali to become one of the few national parks that has retained its original wolf population. See Chapter 2 for discussion of predator control practices in national parks. Published in 1944, *The Wolves of Mount McKinley* remains a classic wildlife study and popular account of the lives of wolves.<sup>10</sup> His work created the foundation of our modern understanding and attitudes toward wolves in North America.<sup>11</sup> For generations, wolves were commonly viewed as wanton killers, unwelcome wherever humans lived. Murie's book emphasized that wolves

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<sup>10</sup>Adolph Murie, *The Wolves of Mount McKinley*, Fauna of the National Parks of the United States, Fauna Series no. 5 (Washington D.C.: Government Printing Office 1944), reprint 1971.

<sup>11</sup> Timothy Rawson, *Changing Tracks: Predators and Politics in Alaska's First National Park*. (Fairbanks: University of Alaska Press, 2001), 244. Rick McIntyre, *A Society of Wolves, National Parks and the Battle over the Wolf*, rev. ed. (Stillwater, Minnesota: Voyageur Press, 1996), 90. Brown, 184.



were an important part of the natural ecosystem while revealing their complex family bonds.

Murie's wolf study at McKinley helped change wildlife management in national parks from the single-minded protection of the more popular prey species to protecting all mammals and their habitats. Wildlife management had a big-game bias in the early decades of the park, as was the norm for all national parks in that era.<sup>12</sup> Murie's ecological views gradually became park policy as McKinley Park progressed from a simple game refuge to a complex wilderness park where the whole ecosystem is protected.<sup>13</sup>

Less well known, but equally important to the present day Denali National Park, is Adolph Murie's role in protecting McKinley's wilderness values during the Mission 66 era (1956-66). He was a leader in the struggle against extensive new visitor facilities that would compromise the wildness of the park. That struggle included McKinley Park's first access controversy - when plans to rebuild and widen the park road forced a reconsideration of the park's primary mission. Largely due to Murie's activism, by the end of the Mission 66 era, park management agreed that the protection of McKinley's premier wilderness was more important than unlimited visitor access.

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<sup>12</sup> Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven: Yale University Press, 1997) gives a good account of the big-game bias prevalent on public lands at the beginning of the twentieth century.

<sup>13</sup> When Mt. McKinley National Park was founded in 1917 it was promoted as a "game refuge" that would serve as a source of game animals to disperse into the surrounding area. Market hunting was banned, and within ten years of the park's founding most subsistence hunting was also disallowed.

### Thesis statement and literature

My interest in Adolph Murie comes from my long-standing personal connection to Denali National Park and my awareness of Murie's history there. This thesis is a narrative account of Adolph Murie's enduring legacy at Denali National Park. It explores the developmental influences in his life that prepared him to become a prominent scientist and wilderness advocate. It explains how Murie's early wildlife studies changed national wildlife management policies and how his transformation into the most influential spokesman for Denali's wilderness redirected the mission and management of Denali National Park.

Historian William E. Brown acknowledges Murie's major contributions in his book on Denali National Park's history, *Denali, Symbol of the Alaska Wild*, saying Murie was "probably the single most influential person in shaping the geography and the wildlife-wilderness policies of the modern park."<sup>14</sup> He credits Murie with establishing an early version of ecosystem management at the park, moderating intrusive development concepts, and justifying boundary expansions to preserve extended wildlife habitat. Brown's book is the authoritative source on the history of the park.

Timothy Rawson's book, *Changing Tracks, Predators and Politics in Mt. McKinley National Park*, is an in-depth account of a serious wildlife management issue at Mount McKinley National Park in the 1930s and 1940s.<sup>15</sup> Rawson analyzes Murie's important role in the wolf-sheep

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<sup>14</sup> Brown, 149.

<sup>15</sup> Timothy Rawson, *Changing Tracks: Predators and Politics in Alaska's First National Park*. (Fairbanks: University of Alaska Press, 2001).

controversy and includes a biographical chapter on Murie's life and wildlife research.

A discussion of the evolution of national park wildlife management, and Murie's role in it, is found in Richard West Sellars' comprehensive history of resource management within the National Park Service, *Preserving Nature in the National Parks, A History*.<sup>16</sup> Sellars includes Murie's role in the changing park policies as the National Park Service moved toward ecological management of its natural areas.

Murie's wildlife research challenged long-standing values in wildlife management. Thus, the significance of his work, including his wolf study at McKinley, is often mentioned in writings of wildlife management. In *Saving America's Wildlife* Thomas Dunlap credits Adolph Murie with outshining previous wildlife biologists with his thorough ecological study techniques. Allston Chase, in his book *Playing God in Yellowstone*, delineates Murie's important contributions at a pivotal time in Yellowstone National Park's wildlife management history.<sup>17</sup>

There is no comprehensive biography of Adolph Murie in existence, and until now, no in-depth analysis of his legacy in today's Denali National Park. This thesis also fills a gap in the literature on the history of Denali National Park and contributes to American conservation history.

I relied heavily on original research and primary sources to chronicle Murie's life, to review his scientific studies and to analyze his

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<sup>16</sup> Richard West Sellars, *Preserving Nature in the National Parks: A History*. (New Haven: Yale University Press, 1997).

<sup>17</sup> Alston Chase, *Playing God in Yellowstone: The Destruction of America's First National Park* (New York: Harcourt Brace Jovanovich, 1987). Thomas R. Dunlap, *Saving America's Wildlife* (Princeton: Princeton University Press, 1988).

wilderness ethic. Interviews and personal communications with individuals intimate with Murie (e.g., son Jan Murie, nephew Martin Murie, widow Louise Murie MacLeod, friends and colleagues) provided new details and perspective on his life. I also interviewed several members of Denali National Park's current and former staff to gain insight into Murie's influence at the park. Archival research constituted an important part of this study, mostly in the Adolph Murie collection at the University of Alaska Fairbanks, but also in the Adolph Murie Collection at the American Heritage Center in Laramie at the University of Wyoming. I examined Adolph Murie's extensive writings, including his field notes, diaries, reports, books, government agency memoranda, and personal letters. I used secondary sources for general historical background and for specific information on changing wildlife management values. Finally, my own experiences in the Denali area for twenty-five years provide me with the background and context to pursue Murie's story.

### **Thesis chapters**

Chapter one begins by establishing a framework from which to understand the whole thesis. The framework is a delineation of Murie's wilderness ethic - what it meant and how it fits into the larger societal context of wilderness values. This chapter shows how Murie's early interest in nature, with guidance from his older brother Olaus, contributed to his development. It includes his first pivotal trip to Alaska in 1922 and continues with his academic training in the new field of animal ecology with exposure to new ideas on wildlife management. The second chapter starts with Murie beginning work as one of the first biologists in the National Park Service's new wildlife division in 1934. It emphasizes his

work on controversial predator issues within the Park Service, his developing ideas of intangible values of wild places, and his gradual personal dedication to Mount McKinley National Park. Chapter three focuses on the Mission 66 era at the park. First it gives the context of nationwide Mission 66 goals and controversies during the 1950s. Then it shows many reasons for Murie's opposition to most of the proposed projects and how Murie became the voice for wilderness values during the Mission 66 controversy. It details the ways Murie inspired others to aid his fight against the wilderness-threatening developments and concludes with discussion of his success. The fourth chapter examines the extent to which Murie's vision has become imbedded in the mission and management of today's park. First it shows how different Denali is today because Murie and other conservationists defended its deeper (wilderness) values. Specific land and visitor management policies are covered in an attempt to gauge Murie's legacy today. The chapter concludes with a discussion of Murie's importance as a wilderness voice while acknowledging the increasing threats to the park's wilderness integrity.

## CHAPTER ONE: BEGINNINGS OF A NATURALIST

This chapter highlights the people and situations that contributed to the development of Adolph Murie's interest in biology and his wilderness ethic. The inspiration Murie received from his physical surroundings and from his close relationship with his brother Olaus formed the underpinnings of his appreciation for wild places and his desire to be a biologist. Adolph's training in the young field of ecology and his involvement with that field's brightest thinkers strengthened his belief in the inherent value of wilderness.

### **Wilderness values**

From early childhood Adolph Murie developed a deep sympathy with the natural world. In boyhood he viewed wilderness as a place to play, camp, fish, and hunt. As an adult he recognized that wild places were important for their value in maintaining intact ecosystems. This appreciation later deepened to include the intrinsic and intangible values of wilderness. His enduring achievement was to integrate two perspectives of nature – a scientific understanding combined with a strong wilderness ethic.

Understanding Adolph Murie's wilderness ethic, or wilderness ideals, is central to understanding a basic premise of this thesis. Murie's wilderness ethic was the source of his legacy of wilderness protection at Denali National Park. It was his particular sense of how wilderness should be regarded and treated that has had a lasting influence at Denali.

Wilderness is a concept that eludes easy definition. Its meaning has changed with history and in the context of each culture.<sup>1</sup> Even on an individual level, one's idea of wilderness depends on the values each person holds meaningful. For the purposes of this thesis the definition of wilderness comes from the 1964 Wilderness Act's definition. It is an area:

untrammelled by man...retaining its primeval character and influence, without permanent improvements or human habitation...(with) outstanding opportunities for solitude or a primitive and unconfined type of recreation.<sup>2</sup>

Wilderness character describes the natural conditions of a wilderness area in combination with its intangible qualities.

Values can be characteristics or qualities of physical things or they can be abstract. Value means that which has worth, a quality, principle or standard considered desirable. Wilderness values are defined here as relatively enduring conceptions of how people value wilderness, or as meanings they attribute to wilderness experiences. Since natural environments give rise to experiences and values that cannot be easily

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<sup>1</sup> See Roderick Nash's *Wilderness and the American Mind* 3d ed. (New Haven: Yale University Press, 1982).

<sup>2</sup> The Wilderness Act of 1964 (92 Statute 3467). Though this is part of the definition of mandated wilderness, the term "wilderness" in this thesis does not mean designated wilderness unless specified as such. This definition of wilderness (and the conception of it in this thesis) is very much the Western idea of wilderness where humans are excluded, except as visitors. A less ethnocentric view is Thomas Catton's concept of inhabited wilderness where people and their subsistence activities are an intrinsic part of wilderness: Theodore Catton, *Inhabited Wilderness: Indians, Eskimos, and the National Parks in Alaska* (Albuquerque: University of New Mexico Press, 1997).

defined or categorized there is no widely accepted conceptual framework for describing wilderness values.

Today researchers and public agencies are beginning to recognize the wide range of human values found in and attributed to wilderness areas. Wilderness values can be generally organized into tangible and intangible human values. Tangible wilderness values are those where wilderness satisfies a physical need, such as the ecological value of living things, or recreational values such as places to hike. Intangible wilderness values are those where wilderness is valued as an end in itself. Intangible values include a wide range of psychological, symbolic, and spiritual values such as love or reverence.

Numerous social scientists have tried to create value typologies as a way to conceptualize values found in leisure, recreation and tourism. In a 2001 study, eight wilderness value themes were evident in public comments received by Denali National Park on legally closing the wilderness core of the park to snowmobiling.<sup>3</sup> Respondents volunteered personal reasons (values) for their support or opposition to the closure. The resulting typology of wilderness values can serve as a reference for the many ways people value wilderness. The eight themes (categories of values) identified were: ecological, esthetic, cultural, psychological, spiritual/moral, bequest, irreplaceable and intrinsic. The study found that intangible values were cited as often as tangible values.<sup>4</sup>

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<sup>3</sup> Linda Franklin, "Wilderness Values of Denali National Park and Preserve, as Reflected by Public Comments Opposing Snowmachining in the Park," University of Alaska Fairbanks Northern Studies term paper, 17 December 2001.

<sup>4</sup> Franklin, 9.



In extrapolating from this study, Adolph Murie's wilderness ethic was made up of three main themes: ecological values, intrinsic values and spiritual values. As a scientist Murie embraced wilderness areas as wildlife habitat with ecological values. He saw wilderness as a place for natural processes, where the "ecological passing pageant" continued unhindered.<sup>5</sup>

But beyond its ecological value, Murie found wilderness personally meaningful for its esthetic and spiritual values. The mere presence of the natural countryside was valuable to him. He saw nature as an esthetic resource that should be preserved simply because of its beauty or uniqueness. The concept of intrinsic value focuses on the worth of wilderness as an end in itself, its inherent good. Spiritual values include love, affection, reverence, respect...rooted in intuitive and emotional experiences. These intangible values of wilderness character make up the "wilderness spirit" Murie often mentioned. Murie's idea of the significance of wilderness is summarized in the opening line to his book *Birds of Mount McKinley* "National Parks serve to perpetuate primeval wilderness, where the highest values are esthetic and spiritual."<sup>6</sup>

### Childhood on the Red River

Murie's wilderness values began to develop back in his early childhood on the Red River in northwestern Minnesota. Since he never knew his father, his half-brother Olaus served as his role model and mentor. Ten years older, Olaus taught Adolph about life and nature.

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<sup>5</sup> Adolph Murie, "A Plea for Idealism in National Parks, A Critique" (10-page critique of the Leopold Report), n.d. approximately 1963, Adolph Murie Reference File, Denali National Park and Preserve Museum, 5.

<sup>6</sup> Adolph Murie. *Birds of Mount McKinley National Park Alaska* (McKinley Park: Mount McKinley Natural History Association, 1963), 1.

Adolph's observation that "Olaus had always been more than a big brother to me" was an understatement.<sup>7</sup> He guided and encouraged Adolph's personal development even after leaving home for college and work. As a result, Adolph followed closely in Olaus's footsteps, even following his path into wildlife biology.<sup>8</sup> In adulthood the brothers' relationship matured to one of collaboration and mutual admiration as each became expert biologists. Their lives were intertwined to the extent that developmental influences in Olaus's life made strong contributions to Adolph's growth as a naturalist.

Joachin and Marie (Frimanslund) Murie emigrated from Norway to settle on the Red River south of Moorhead Minnesota in 1888. Their first son, Olaus, was born the next year, followed by Martin four years later. Joachin Murie encouraged his sons' interest in nature, and taught Olaus many practical outdoor skills such as cutting wood, hunting, and fishing.<sup>9</sup> Joachin died of unknown causes when Olaus was seven years old.<sup>10</sup> Marie's second marriage to Ed Wickstrom, a Swede, produced Adolph in 1899.<sup>11</sup> When Adolph was only six weeks old, Ed Wickstrom died of tuberculosis.

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<sup>7</sup> Adolph Murie. *A Naturalist in Alaska* (New York: Devin-Adair Company, 1961), 4.

<sup>8</sup> Louise Murie MacLeod, interview by author, Jackson, Wyoming, 23 August 2002. Many of the details of Adolph Murie's childhood are from this interview and from an unpublished 7-page biography "Adolph Murie 1899 - 1974" by Louise Murie MacLeod, n.d. approximately 1980, Adolph Murie Reference File, Denali National Park and Preserve Museum.

<sup>9</sup> Gregory D. Kendrick, "An Environmental Spokesman, Olaus J. Murie and a Democratic Defense of Wilderness," *Annals of Wyoming* 50, no. 2 (1978): 218.

<sup>10</sup> Charles Craighead and Bonnie Kreps, *Arctic Dance, The Mardy Murie Story* (Portland: Graphic Arts Center Publishing, 2002), 34.

<sup>11</sup> Ed Wickstrom's original surname was Nelson, but he went by Wickstrom for unknown reasons (Louise Murie MacLeod interview).

Marie retook the name of her first husband and gave the Murie name to Adolph.<sup>12</sup>

Making ends meet was a struggle for the fatherless family. Marie took in laundry and cared for orphaned children for income (eventually adopting Clara who became the boys' younger sister). Olaus worked for neighboring farmers in the summer, delivered milk from the family cow, and sold firewood in the winter.<sup>13</sup> As Martin, then Adolph, grew old enough, they too contributed to the family income through a variety of jobs. Despite the hardship, Marie encouraged her children's education and outdoor adventures. She believed education was the key to self-improvement and had a dream of college for her children.<sup>14</sup>

The popular nature stories of naturalist-author Ernest Thompson Seton accelerated Olaus's interest in the woods and wildlife.<sup>15</sup> Every Seton book available was passed on brother-to-brother, and all three were especially enamored with *Two Little Savages*, the story of two boys who survive in the woods by living like Indians. Awareness and reverence for nature were part of Seton's emphasis, as well as themes portraying animals in a sympathetic light. Adolph and Olaus identified with Seton's values throughout their lives.<sup>16</sup> Although they were fascinated by animals they were not sentimentalists. Hunting and trapping were part of the outdoor activities that occupied much of the brothers' time and energy. They were captivated with the woods, primitive camping skills, and "Indian" ways of

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<sup>12</sup> Adolph went by the name Murie from childhood, legally making it his name when he joined the National Park Service in the mid-1930s.

<sup>13</sup> Louise Murie MacLeod interview.

<sup>14</sup> Kendrick, 219-220.

<sup>15</sup> Jan Murie, interview by the author, Moose, Wyoming, 21 August 2002.

<sup>16</sup> Jan Murie.

living. They skated and canoed on the Red River. Their favorite place was a spot they called “the wilderness,” an undisturbed tract of forest perfect for camping, fishing and trying out woodcraft skills.<sup>17</sup> Olaus Murie recognized the significance of their childhood in shaping the brothers’ consuming interest in nature, “The Red River runs through that town. There were woods, birds, mammals. It was living close to the earth – you know what that does to you.”<sup>18</sup> The time spent together in their boyhood “wilderness” added to its significance. In a mid-life letter to Adolph, Olaus recalled, “I always hark back to the camping trip in the wilderness, when we made our bed on the leaves between the two logs, under the moon – we three together...”<sup>19</sup>

### Olaus mentors Adolph

The boys were bright students and following their mother’s wishes studied diligently. Olaus started sketching birds and other animals as a young teen, inspired by Seton’s example of copiously illustrating his books. Olaus received a scholarship to study biology at Fargo College, just across the Red River from Moorhead. After two years he followed his mentor, Arthur M. Bean, to Pacific University in Forest Grove, Oregon. When Olaus was away at college in Oregon he wrote many letters to Adolph and Martin, continuing his guiding role. He encouraged his

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<sup>17</sup>Adolph Murie, interview by Herbert Evison, tape recording transcript, October 1962, Medford, Oregon, Adolph Murie Reference File, Denali National Park and Preserve Museum. “The wilderness” was mentioned by several other sources: in interviews with Jan Murie and Louise Murie MacLeod, and by Olaus Murie in several writings.

<sup>18</sup> Peggy Simpson Curry, “Portrait of a Naturalist,” *The Living Wilderness*, (Summer-Fall 1963): 17.

<sup>19</sup> Olaus Murie, Jackson, Wyoming, to Adolph Murie, 27 March 1942, Martin Murie Collection.

brothers to take nature seriously and to keep notes on their nature observations. In a letter to eleven-year-old Adolph his detailed advice was that of an experienced scientist to a budding naturalist:

I am glad you are studying the birds. And I am also glad that you write down what you see. Is Martin doing that too? You ought to keep a list of the birds and check off those that you see each day... I would make a list of them on a card or in a book, so that you would not have to remember them all at once. When you see a bird describe it. Write down its shape, size, and colors, also describe its call or song if you can. Then go to some book and look up the same bird, and see how near right you were in your description.<sup>20</sup>

Olaus encouraged personal development in every subject:

Write all you can. Write notes on what you see, write stories, write anything, write letters. The main thing is to write. If I had done more of that when I was your age, I would get along better now.<sup>21</sup>

Illustrating one's field notebooks with sketches was integral to a naturalist's work and Olaus encouraged his brothers to expand their artistic talents: "Keep up your drawing, Adolf (sic), and send me samples occasionally. Keep in practice. Drawing is more important than painting

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<sup>20</sup> Olaus Murie, Forest Grove, Oregon, to Adolph Murie, 16 April 1911, Martin Murie Collection.

<sup>21</sup> Olaus Murie, to Adolph Murie, 16 April 1911, Martin Murie Collection.

with you yet. Everything depends on the drawing you know.”<sup>22</sup> While middle brother Martin shared Olaus’s artistic talent, Adolph’s drawings remained simplistic. He sketched observations in his field journals, but later on Olaus illustrated all of Adolph’s published works.<sup>23</sup>

After graduating from Pacific University in 1912, Olaus stayed in Oregon two more years working as a field naturalist for William L. Finley, then state game warden. Olaus collected bird and mammal specimens and learned wildlife photography from Finley, also known as the “the Birdman of Oregon.”<sup>24</sup> Though Olaus would continue to collect specimens (a basic part of being a biologist in his era) by trapping and shooting for another three decades, he was looking forward to the day when enough specimens had been collected. In a 1912 letter to Adolph he praised his brother’s trapping success, while adding “I’d like to see the day, though Adolf (sic), when we don’t have to trap animals any more.”<sup>25</sup>

Olaus launched his career in northern biology on a collection expedition in Labrador and Hudson’s Bay for the Carnegie Museum in 1914.<sup>26</sup> He went as veteran ornithologist W.E. Clyde Todd’s assistant and to collect museum specimens. As an admirer later wrote, Todd was known for his “scrupulous accuracy and painstaking care in both curatorial work and

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<sup>22</sup> Olaus Murie, Forest Grove, Oregon, to Adolph Murie, 11 November 1912, Martin Murie Collection. Olaus often spelled Adolph’s name “Adolf” in letters from that period.

<sup>23</sup> Louise Murie MacLeod interview. Olaus Murie is widely known for his prolific drawings and sketches.

<sup>24</sup> Kendrick, 222.

<sup>25</sup> Olaus Murie, to Adolph Murie, 11 November 1912, Martin Murie Collection.

<sup>26</sup> Kendrick, 222.

research.”<sup>27</sup> Under Todd’s tutelage, Olaus progressed from being a “novice in preparing specimens” to an expert by the end of his apprenticeship.<sup>28</sup> As Olaus established himself as a wildlife biologist in northern Canada he continued to remind his brothers to “draw all the time and write” in his letters home.<sup>29</sup>

Olaus joined the Army Air Corps in World War I and trained as a balloon observer at Fort Omaha, Nebraska but was never sent overseas.<sup>30</sup> In response to Adolph’s news that he was considering joining the new Student Army Training Corps (SATC), a program that combined university studies with military training, Olaus wrote several pages to his youngest brother on things to consider before making a decision. He included some fatherly advice:

I can’t help thinking it might be a good thing – provided (here I want to emphasize) provided you don’t ever fall for the temptations you will find in the University life and in the City. I want you, Adolph, to keep up the standard all three of us have put up for ourselves. Some of the entering wedges are smoking and dancing. As for card playing, it is well to swear off on that in college life – I know! Adolph I know you

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<sup>27</sup> From a tribute to Todd at a special exhibit in 1974 at the Carnegie Museum in Pittsburg; available from <http://www.bchistory.org/beavercounty/BeaverTown/People/Town.People.Todd.html>; Internet, accessed 18 October 2003.

<sup>28</sup> Olaus Murie, *Journey in the Far North* (Palo Alto: American West Publishing, 1973).

<sup>29</sup> Olaus Murie, to Adolph Murie, 21 April 1916, Martin Murie Collection.

<sup>30</sup> Kendrick, 229.

will do the right thing, but I want to mention these things anyway.<sup>31</sup>

In 1920 Olaus felt honored to get the job of studying the migration routes and habits of caribou herds in Alaska: “what an assignment – to find out all I could about caribou in this whole immense region of the North!”<sup>32</sup> Edward W. Nelson, Chief of the U.S. Biological Survey (later U.S. Fish and Wildlife) assigned Olaus to map the Alaskan caribou’s migratory routes, estimate their numbers and study their habits. Olaus’s official title was “Assistant Biologist and Federal Fur Warden” as he served as the federal fur-trapping warden for interior Alaska in addition to his other duties.<sup>33</sup> Olaus carried out his work with the assistance of local guides at first, traveling all over Alaska, by dog sled in the winter, sometimes by boat or with pack dogs in the summer.

#### **Adolph becomes Olaus’s assistant in Alaska**

In 1922 Martin Murie was to join Olaus as his field assistant on the caribou study. Just before his scheduled departure for Alaska, Martin died from complications of an infection after a tonsillectomy.<sup>34</sup> Olaus then turned to Adolph to take Martin’s place as his field assistant. Adolph was

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<sup>31</sup> Olaus Murie, Fort Omaha, Nebraska, to Adolph Murie, 23 September 1918, Martin Murie Collection. The War Department delayed the start of the SATC until October, 1918, and by then Adolph had started biological studies at Fargo College. He joined the SATC at Fargo, but the Armistice was signed on November 11 that year ending the war.

<sup>32</sup> Olaus Murie, *Journey to the Far North*, 104.

<sup>33</sup> Margaret Creel, “The Murie Collection,” an unpublished narrative of the research projects of both Adolph and Olaus Murie, 11 March 1987, Murie Center Library, 4-5.

<sup>34</sup> Louise Murie MacLeod interview provided the information in this paragraph.



eager to join his much loved and revered brother on the kind of adventure he could only imagine in “the wilderness” of Moorhead, Minnesota. “It was not only the promise of high adventure but also the anticipation of the companionship that thrilled me” he remembered.<sup>35</sup>

Adolph’s first glimpse of McKinley Park was in September 1922 when he arrived in Alaska to start his job as Olaus’s assistant. Olaus met him at the train station (near the site of today’s train station in the park) and the two brothers walked out to Olaus’s camp on the upper Savage River following the primitive pack trail. As field biologists, part of their work was to collect information on all birds and mammals they found. Olaus was Adolph’s mentor once again, educating him in the fine details of biological fieldwork during their mammal inventories and specimen collection.

By the time Adolph and Olaus began working together in Alaska, Olaus was a professional biologist proficient in the C. Hart Merriam school of biological fieldwork. Merriam was the first head of the Bureau of Biological Survey from 1885 to 1910. Biographer Kier Sterling credits Merriam with giving the young science of mammalogy a solid underpinning at the start of the twentieth century: “Within fifteen years, the number of known species and subspecies of American mammals had nearly quadrupled, and most of the credit for this unprecedented change must be given to Merriam.”<sup>36</sup> Being a collector-curator was the standard in biological work in Merriam’s time and when Olaus Murie began his career in biology. The Merriam field method emphasized collecting many

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<sup>35</sup> Adolph Murie, *A Naturalist in Alaska*, 4.

<sup>36</sup> Kier B. Sterling, *Last of the Naturalists: The Career of C. Hart Merriam* (New York: Arno Press, 1977), 319.

specimens (skins or skeletons), careful preservation, and detailed description and documentation of each specimen. Eminent zoologist Ernst Mayr noted that description forms the basic knowledge in all sciences, and “the younger a science is, the more descriptive it has to be to lay a factual foundation.”<sup>37</sup>

Naturalists as far back as Linnaeus kept daily journals but Merriam institutionalized the tradition of a field notebook as the vital tool for recording data and descriptions.<sup>38</sup> It was where the day’s activities and all observations were recorded. The notations could be as mundane as the breakfast menu, as detailed as the components in fox scat or as unusual as the story of following the tracks of a wolverine dragging a moose leg for two miles.<sup>39</sup> Understanding the importance of detailed note taking, Adolph started a journal at the beginning of his trip to Alaska while waiting for the departure of his steamer in Seattle.<sup>40</sup> It became his lifetime habit to keep daily journals of his observations and reflections in addition to the field notebooks and specimen logs he kept on all his outings and expeditions.

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<sup>37</sup> Ernst Mayr, *This is Biology, the Science of the Living World* (Cambridge: Harvard University Press, 1997), 28.

<sup>38</sup> Sterling describes Merriam’s field method and his lifelong journaling. Merriam’s protégé, Joseph Grinnell, is generally credited with developing a more intricate method of field notation with three separate notebooks: a field notebook to use while making observations, a journal and a specimen account. See Steven G. Herman, *The Naturalist’s Field Journal, A Manual of Instruction Based on a System Established by Joseph Grinnell* (Vermillion, South Dakota: Buteo Books, 1986).

<sup>39</sup> Adolph Murie, *A Naturalist in Alaska*, 136-137.

<sup>40</sup> His 1922-23 diary begins with his waiting in Seattle for his steamer to Alaska in August 1922. Adolph Murie Collection, temporary box 5, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

At their base camp on the Savage River Adolph helped Olaus and Harry Karstens, the park's first superintendent, finish building caribou corrals for the next summer's captive breeding project. E. W. Nelson (the Biological Survey chief) thought the McKinley caribou were the largest in Alaska and hoped to improve the domesticated reindeer stock through deliberate interbreeding with the park's caribou. Working alongside the new national park's superintendent, and seeing surveyors choosing the route for a park road, inspired the Muries to think and talk about the park's future. While the prevailing attitude was one of opening up the country, Adolph and Olaus did not share that pioneer vision and hated the thought of the new road. Adolph recalled their sentiments years later: "it was innate in us, we had a feeling it was too bad a road had to come into this wilderness."<sup>41</sup>

The brothers spent five weeks in the park that fall hiking, observing and collecting specimens. As Adolph Murie said years later: "It was just like being in heaven, being in there. We had the mountain sheep and caribou all around us, and grizzly bears; and for me it was wonderful..."<sup>42</sup> Adolph's boyhood adventures in nature turned into the real thing in Alaska.

After the autumn in McKinley, Olaus and Adolph rented a small cabin in Fairbanks to prepare for their winter dogsled trip into the Brooks Range. It would be Olaus's third year of mapping the caribou's migratory routes and estimating their numbers. They exercised their sled dogs with daily runs on the frozen Tanana River as they waited for the winter snows.

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<sup>41</sup> Adolph Murie in Evison interview, 1. Evison's interview with Adolph Murie is the source of information in this paragraph.

<sup>42</sup> Adolph Murie in Evison interview, 2.

Since Olaus was courting Margaret (Mardy) Thomas the brothers spent many evenings at her family home. There, ten-year-old Louise Gillette, Mardy's half-sister, enjoyed Adolph's company and teasing ways. Mardy would marry Olaus two years later and Louise would become Adolph's wife ten years in the future.<sup>43</sup>

On November 25, 1922 the brothers started their five-month expedition to survey the migratory routes and habits of caribou herds for the Biological Survey. The expansion of the reindeer industry was underway to provide a livelihood for native groups and Nelson hoped to identify the locations and movement patterns of caribou. He wanted to establish the reindeer in separate locales to keep them from mixing genetically with the caribou.<sup>44</sup> The Muries traveled with two dog teams from Nenana on the Tanana River, covering a 1500-mile loop that would end in Fairbanks the following spring. They interviewed natives and miners about their caribou sightings, mapped the distribution of caribou, and collected specimens. With the advent of bush planes some years away, it was the heyday of dogsled travel in rural Alaska when dog-teams hauled mail, freight and passengers across the Territory. The network of trails had roadhouses at regular intervals, but the Muries usually camped in their seven-by-nine foot silk tent (heated by a wood-burning Yukon stove). They arrived in Alatna in time to take part in the village's Christmas and New Year festivities before breaking trail 150 miles overland to the head of

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<sup>43</sup> Adolph Murie, *A Naturalist in Alaska*, 5-6. Louise Murie MacLeod, "Adolph Murie 1899 - 1974."

<sup>44</sup> The reindeer came from caribou stock domesticated thousands of years earlier in Scandinavia. Nelson did not want the wild caribou to gain reindeer genes, though he approved of and promoted caribou interbreeding with reindeer to improve the reindeer population.

the Kutuk River. Their expedition included regions rarely visited by outsiders, such as the Koyukuk River Valley in the Brooks Range. They returned to Fairbanks via the Chandalar River, Fort Yukon and Circle on the last snow the following April.<sup>45</sup>

Adolph and Olaus returned to Mount McKinley National Park in June to continue their biological studies and to try to capture caribou. It was an experiment in live trapping caribou that involved building long fences across the upper Savage River valley to funnel caribou into a corral. They caught some bulls that were too old to handle easily so they let them go. The one young bull they caught escaped when they were leading it down to the railroad station.<sup>46</sup> The caribou capture was a failure, but the summer was a success as the brothers continued their biological studies and Adolph's affection for the park grew.

When autumn returned the brothers rented the cabin a block from the Gillette home in Fairbanks once again. Olaus and Mardy had become engaged the previous summer (when she visited him at McKinley Park) so Olaus was in no rush to leave Alaska. He and Adolph were officially finishing scientific reports, and Adolph even had time to coach women's basketball at the college. The brothers departed Fairbanks in December 1923, taking the Alaska Railroad from Fairbanks to Seward to catch their steamer south.

The year-long research trip in Alaska with Olaus was a pivotal experience in Adolph's life. It was there he came to know the desirable life

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<sup>45</sup> Adolph Murie, to Grant Pearson, 29 January 1952, Adolph Murie Reference File, Denali National Park and Preserve Museum.

<sup>46</sup> Adolph Murie's interview by Herbert Evison provided the details of the caribou capturing attempt. Differing accounts of the Murie brothers' caribou capturing appear in other publications.

of a field biologist and the place where he would devote so much of his life: Mt. McKinley National Park.

### **Murie's academic training**

Upon his return to Minnesota, Adolph Murie finished his B.S. degree in biology in 1925 at Concordia College in Moorhead (Fargo College had closed).<sup>47</sup> For the following two summers he was a ranger at Glacier National Park at St. Mary's entrance station on the eastern side of the park and he taught high school and coached basketball in Hamilton, Montana for the winter. Becoming a field biologist remained his dream and with that purpose he began a master's degree program at the University of Michigan in 1926. It was also a way to be with his brother again for Olaus had just finished his caribou study in Alaska and was taking a leave from the Biological Survey to turn his field notes into a master's degree at Michigan. Olaus's family, Mardy and one-year-old Martin joined the brothers in Ann Arbor.

Olaus's studies at the University of Michigan were a short break in his Biological Survey work, but for Adolph it was another turning point in his life. His exceptional work was noticed by one of his professors, Lee R. Dice, a leader in the new academic discipline of animal ecology. By the end of Adolph's first year at Michigan Dice offered him a Ph.D. fellowship.

Adolph returned to St. Mary's in Glacier National Park as a ranger for one more summer (1927) and did much of his Ph.D. research on the common deer mouse (*Peromyscus*) while there. He also managed to visit

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<sup>47</sup> Concordia College diploma, granting Adolph Murie a Bachelor of Arts degree in June 1925, Adolph Murie Collection, temporary box 3, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

Olaus and Mardy in the Tetons and give Olaus some help with his elk study. In return Olaus helped Adolph collect specimens of *Peromyscus* for his Ph.D. studies.

As Murie's advisor and mentor, Dice exposed Murie to progressive ecological views. The young science of ecology focused on interpreting the interrelationships of living organisms and their environment. It was a new holistic approach to the natural world, rather than the more simplistic reliance on descriptive collecting and cataloguing of earlier biologists. The trend toward natural wildlife management and away from manipulating predator populations was just beginning when Murie began his Ph.D. work. Murie's advisor Lee Dice was part of the first cadre of ecologists advocating preservation of all wildlife (including predators).<sup>48</sup>

Dice had already gained notice among other mammalogists for his position that the widely held view of predators as worthless wildlife was mistaken. Predator control, a tradition from the days of settling the country and trying to tame the land into farm and ranch lands, was still the widely accepted policy on public lands, as well as the norm on private lands. Predator control meant killing wolves, coyotes, and cougars, to protect favored animals such as moose, sheep and elk, as well as livestock.<sup>49</sup> Since ecology emphasized the interdependence of all living things within a shared environment, ecologists viewed predator control with skepticism. In 1925 Dice explained the basis for his minority view on predators in the article "The Scientific Value of Predatory Mammals:"

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<sup>48</sup> Dunlap, 76.

<sup>49</sup> Predator control is still practiced today in particular locations and situations throughout the United States, but it is no longer the unquestioned practice that it was eighty years ago.

The lives of all species of animals living in one locality are closely interrelated; especially close are the relations between the carnivores and the forms on which they prey. All of these associated forms, predatory and non-predatory alike, have evolved under mutual adjustment, and all of these associates must be considered...I am sure that the extermination of any species, predatory or not...is a serious loss to science.<sup>50</sup>

Being taught by one of the leaders in a pivotal predator control controversy was good training for Murie. He too would be central to predator control controversies when he conducted studies of coyotes and wolves more than a decade later.

Dice was also a role model for Murie in ways that went beyond academic training. Murie shared Dice's enthusiasm for field studies and later emulated Dice's lifestyle of including his family in his summers' field research.<sup>51</sup> Murie also followed Dice's example by keeping extremely well organized and complete files on his research.<sup>52</sup> Though all biologists valued careful measurement and documentation, Lee Dice was particularly known for his detailed and meticulous records.<sup>53</sup>

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<sup>50</sup> Lee R. Dice, "The Scientific Value of Predatory Mammals," *Journal of Mammalogy*, 6 (February 1925): 27.

<sup>51</sup> "Lee Raymond Dice (1887-1977)," *Journal of Mammalogy* 59(3): 635-644.

<sup>52</sup> Murie left an extensive collection of papers after his death. The American Heritage Center at the University of Wyoming and the Alaska and Polar Region Collections at the University of Alaska Fairbanks Rasmuson Library each have an Adolph Murie Collection. It appears he kept all of his notebooks, journals, diaries, letters and manuscripts (including several versions of his drafts).

<sup>53</sup> "Lee Raymond Dice (1887-1977)," 638.



### Murie's early ecological studies

After completing his Ph.D. dissertation in 1929, *The Ecological Relationship of Two Subspecies of Peromyscus in the Glacier Park Region, Montana*, Murie stayed on with Dice at the University of Michigan's Museum of Zoology. Over the next five years he conducted four separate studies: of moose, Central American mammals, red foxes and white-tailed deer.

Murie went from studying one of the smallest mammals in North America (the field mouse) to one of the largest when moose became the subject of his first post-doctoral study. During the summers of 1929 and 1930 Murie conducted an ecological study of the moose population of Isle Royale, an island off northern Michigan in Lake Superior. Moose had lived on the island for only about two decades, but with no natural predators their population had rapidly increased (from an estimated 300 in 1917-18 to an estimated 1000-3000 in 1930).<sup>54</sup> In his academic training as an ecologist Murie learned the importance of a whole systems approach to studying biological problems and tried to consider all environmental factors surrounding the moose. Murie found that the moose had over-grazed their available browse and predicted that starvation and disease would soon cause a catastrophic die-off. He warned that several tree species were being harmed by over-browsing and to prevent further devastation he recommended that moose numbers be reduced.

Murie suggested controlled hunting or the introduction of predators (wolves or cougars) to reduce the moose population. In the conclusion to

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<sup>54</sup> David L. Mech, *The Wolves of Isle Royale*, Fauna Series No. 7 (Washington, D.C.: United States Government Printing Office, 1966), 22.

his study, Murie wrote “The land should not be teeming only with moose but teeming with all of nature. The aim of wild life management should be to give consideration to all life so as to have nature present in good proportions.”<sup>55</sup>

The unnaturally high population of moose helped Murie articulate his growing concern for the value of the wild. When he talked with visitors on Isle Royale who expressed great disappointment when they saw only three or four moose at a time he realized “instead of observing the moose and perhaps having its wild spirit arouse a dormant kindred spirit in them, they merely counted the animals.”<sup>56</sup> He wrote, “For the greatest enjoyment of moose, it is not particularly desirable to have them so plentiful that we involuntarily compare the gatherings of them to a prosperous barnyard.”<sup>57</sup>

Murie thought that the wilderness of Isle Royale distinguished it from surrounding areas and recommended that it be added to the National Park system.<sup>58</sup> His report “Qualifications and Development of Isle Royale as a National Park” influenced NPS Director Harold Bryant to approve the creation of the new park in 1931.<sup>59</sup> Unfortunately, neither of Murie’s recommendations for reducing the moose population were implemented and the moose population crashed four years later just after

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<sup>55</sup> Adolph Murie, *The Moose of Isle Royale*, University of Michigan Museum of Zoology Miscellaneous Publications No. 25 (Ann Arbor: University of Michigan Press, 1934), 41.

<sup>56</sup> Adolph Murie, *The Moose of Isle Royale*, 43.

<sup>57</sup> Adolph Murie, *The Moose of Isle Royale*, 43.

<sup>58</sup> Louise Murie MacLeod, “Adolph Murie 1899 - 1974,” 3.

<sup>59</sup> Robert Sterling Yard, letter to Adolph Murie, 24 June 1935, Martin Murie Collection.

the University of Michigan Press published Murie's book, *The Moose of Isle Royale*, in 1934.<sup>60</sup>

In the fall of 1930 Lee Dice made Murie the assistant curator of mammals at the University of Michigan's Museum of Zoology. A few months later he joined two other biologists, a botanist and an ornithologist, on a museum-sponsored expedition to Uaxactun in northern Guatemala. Their purpose was to collect floral and faunal specimens at a Mayan ruin being excavated by the Carnegie Institute.<sup>61</sup> On their way to Uaxactun they were delayed in British Honduras (now Belize) for two months, when impassable trails during the prolonged rainy season prevented travel to their destination in Guatemala. Murie found the delay advantageous as they were able to collect specimens in several Belizean localities before making additional extensive collections at Uaxactun. With the help of a native hunter, Murie collected 700 specimens of fifty mammal species, including peccaries, possums, bats, gophers and rats. Among the nine rat species collected, Murie described a new one: the rice rat *Oryzomys couesi pinicola*. He also brought back something that would haunt him later in life: malaria.

Throughout his time at the University of Michigan Adolph traveled to Wyoming every summer and continued to assist Olaus with his elk study. Adolph and Olaus also worked jointly on a study of mice and

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<sup>60</sup> Mech, 24. In an interesting turn of events, wolves naturally dispersed over the infrequently frozen Lake Superior to Isle Royale (20 miles) by the late 1940's. Wolves have lived on the island ever since and have become one of the most studied wolf populations in the world. Moose continue to live on the island as well with numerous fluctuations in their population since Murie's study.

<sup>61</sup> Adolph Murie, *Mammals From Guatemala and British Honduras* Museum of Zoology Miscellaneous Publications No. 26 (Ann Arbor: University of Michigan Press, 1935) is the source for this paragraph on Murie's study in Central America.

published two articles on their findings.<sup>62</sup> By 1930 Jackson Hole, Wyoming had become home base for the extended Murie family. Marie and Clara Murie moved from Minnesota to join Olaus, Mardy and their children. On a visit to the Gillettes (Mardy's family) in Twisp, Washington Adolph became reacquainted with Louise Gillette and they were soon engaged. Louise and Adolph married in Jackson in 1932.

A study of the ecology of the red fox was Murie's next project. He studied foxes in the Edwin S. George Reserve, the Museum of Zoology's 1300-acre fenced study area in southeastern Michigan. Murie again used his whole systems approach to determine the fox's effect in its world and his conclusions reinforced his beliefs that the complexity of nature needed to be recognized. Murie collected and dissected fox scats to analyze what they ate. He also observed the fox's behavioral patterns and noted that they killed and discarded many shrews without eating them. He concluded that the fox had a large impact on the shrew population, something he would have never noted if he had only studied fox scat. Murie's study report, *Following Fox Trails*, published by the University of Michigan in 1936, was subsequently used as university course material in biology programs throughout the country as an exemplary example of the need to blend qualitative and quantitative methods to tell the full story in wildlife research.<sup>63</sup>

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<sup>62</sup> Adolph Murie and Olaus J. Murie, "Travels of Peromyscus," *Journal of Mammalogy* 12, no. 3 (1931): 200-209. "Further Notes on Travels of Peromyscus," *Journal of Mammalogy* 13, no. 1 (1932): 78-79.

<sup>63</sup> Adolph Murie, *Following Fox Trails*, University of Michigan Museum of Zoology Miscellaneous Publications No. 32, 8/7/36. Fred Dean, interview by author, Fairbanks, Alaska, 30 January 2003.

The fox study was Murie's first predator study and he found "the fox should be permitted to occupy its rightful niche in the woods and fields."<sup>64</sup> As would become his habit, Murie added personal support for the value of the wild in his conclusions:

Besides the economic there are also aesthetic values which are often too intangible to receive the attention they deserve. The feeling of a woods is much improved by the presence of a fox. It is good to know that the fox is present in a region for it adds a touch of wilderness to it, gives tone to a tame country.<sup>65</sup>

In his nine years at the University of Michigan Adolph firmly established his own skills and depth as an ecologist and stepped out of the shadow of his brother Olaus.

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<sup>64</sup> Adolph Murie, *Following Fox Trails*, 44.

<sup>65</sup> Adolph Murie, *Following Fox Trails*, 44.

## CHAPTER TWO: CAREER AS AN ECOLOGIST

**Murie joins the Park Service's new Wildlife Division**

In 1934 Murie left the University of Michigan to join the National Park Service as one of the original biologists in the new Wildlife Division. Seeking conservation-oriented biologists to begin investigating wildlife in western parks, division chief George Wright hired Murie. Returning to work in the national parks appealed to Adolph, as did moving out west and being closer to his brother.<sup>1</sup>

The Wildlife Division was based at the University of California in Berkeley where Joseph Grinnell had taught a generation of ecologists including George Wright and Lee Dice, Murie's advisor at the University of Michigan. Grinnell was an early advocate of national park management based on scientific research instead of visual appearances; he wanted biologists to have as much influence in the parks as landscape architects.<sup>2</sup> Park Service historian Richard Sellars said:

Grinnell's ecological views reflected the evolving concepts of nature and natural systems that marked a significant scientific advancement during the period when Wright and his fellow Park Service biologists were launching their careers.<sup>3</sup>

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<sup>1</sup> Louise Murie MacLeod, "Adolph Murie 1899-1974," 4.

<sup>2</sup> Victor H. Cahalane, "The Evolution of Predator Control Policy in the National Parks," *The Journal of Wildlife Management* 3 (1939): 235.

<sup>3</sup> Sellars, 96. See Sellars, Chap. 4, for more on Grinnell's early role in the Park Service's Wildlife Division.

George Wright had used his personal money to fund an extensive field survey of flora and fauna in the national parks (including Mount McKinley National Park) in the early 1930s. That study team consisted of Wright and two other Grinnell-trained biologists, Ben Thompson and Joseph Dixon. Their landmark document, “*Fauna of the National Parks of the United States*” (known as Fauna No. 1) was the Park Service’s first comprehensive statement of natural resource management policies.<sup>4</sup> Fauna No. 1 marked a radical departure from earlier practices by proposing the perpetuation of natural conditions in national parks.<sup>5</sup>

### **Facade management and predator control**

Scenery had provided the primary inspiration for most of the early national parks. What Richard Sellars called “façade management”: “protecting and enhancing the scenic façade of nature for the public’s enjoyment, but with scant scientific knowledge and little concern for biological consequences” was the standard practice in national parks.<sup>6</sup> Part of maintaining the scenic façade was keeping an abundance of favored animal species visible. Park managers thought they were insuring the perpetuation of hooved mammals such as bison, elk, antelope, sheep, and deer by killing their predators. Victor Cahalane (Wildlife Division chief for two decades) later described the extent of predator killing in the national parks in the early 1920s:

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<sup>4</sup> George M. Wright, Joseph S. Dixon, and Ben H. Thompson. *Fauna of the National Parks of the United States: A Preliminary Survey of Faunal Relations in National Parks*, Contributions of Wildlife Survey, Fauna Series no. 1 (Washington, D.C.: Government Printing Office, 1933).

<sup>5</sup> Sellars, 96.

<sup>6</sup> Sellars, 4-5.

Predator control was practiced with thoroughness, and the list of undesirable species increased to include not only the cougar, wolf and coyote, but also the lynx, bobcat, foxes, badger, mink, weasel, otter, and marten. Even pelicans were reduced in numbers in Yellowstone on the grounds of (stocked) trout protection.<sup>7</sup>

Since predator control in the parks followed the general pattern of the times where manipulating nature for the benefit of humans was the norm, the value of killing predators was rarely questioned.

Grinnell and Wright understood that killing populations of animals was ecologically unsound. They understood that predators' had an important place in nature as components of ecological systems where disruption of any component could have negative consequences on other components.<sup>8</sup> Wright believed that only a new emphasis on science could save the national parks' natural integrity, i.e., their natural ecosystems. He thought management decisions should be based on information derived through scientific research with priority given to the preservation of natural biological processes.

One of Adolph Murie's first assignments with the Park Service was conducting wildlife studies on Washington's Olympic Peninsula in anticipation of it being designated a national park.<sup>9</sup> He confirmed that wolves were extinct, and recommended reintroducing them to the Olympic

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<sup>7</sup> Cahalane, 230-31.

<sup>8</sup> See Chapter 1 of this text on early ecologist Lee Dice and his part in changing views of wildlife management.

<sup>9</sup> The area was designated Mt. Olympus National Monument in 1909; it became Olympic National Park in 1938.



Mountains.<sup>10</sup> His recommendation was far ahead of its time: it would be sixty years before wolves were reintroduced in any national park – in Yellowstone in 1995.<sup>11</sup>

Adolph Murie, and the other national park biologists starting their careers in the 1920s and '30s, considered George Wright a mentor. *Fauna No. 1*, with its ecological emphasis, became the guiding text for a generation of academically-trained park biologists.<sup>12</sup> As they conducted scientific studies the biologists' efforts were part of a new era in natural resource management within the national parks. The new era had begun when National Park Service Director Horace Albright ordered the cessation of unlimited predator killing soon after Wright's *Fauna No. 1* documented its extent in the national parks. In addition Wright's vigor and charisma successfully launched the Wildlife Division into a position of influence in just a few years. But park biologists were not park managers and their vision of scientific management ran counter to a fundamental set of values held by superintendents and regional directors. In the traditional Park Service culture, scenery and tourism were what mattered.

The scientific movement Wright led lost momentum after his sudden death in an automobile accident in 1936. Murie was one of many who later saw Wright's death as the first in a series of blows to the Wildlife

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<sup>10</sup> Tim McNulty, "Olympic Park's Missing Predator," *Defenders, the Conservation Magazine of Defenders of Wildlife* (Summer 1997); available from <http://www.defenders.org/olym01.html>; Internet, accessed 11 November 2003.

<sup>11</sup> McIntyre, 117. Reintroducing wolves in Olympic National Park has been seriously discussed and studied from 1997 to present.

<sup>12</sup> Lowell Sumner, "Biological Research and Management in the National Park Service: A History," *George Wright Forum* (Autumn 1983), 10.

Division and to scientific management in the parks.<sup>13</sup> From Wright's death into the 1960s, scientific research within the Park Service took a backseat to the traditional emphasis on tourism. Façade management continued as the preferred agency perspective throughout Adolph Murie's thirty-year career as a Park Service biologist.<sup>14</sup>

### **Murie's coyote study in Yellowstone Park**

Since Albright's new policy still allowed for predator control when predators endangered other species, its mixed message created strife within the Park Service. Park managers and wildlife biologists found themselves at odds in their interpretations of what constituted endangering other species. The Department of the Interior ordered a study of Yellowstone predators when internal disagreements persisted at Yellowstone over coyote control.<sup>15</sup>

At Yellowstone, coyote numbers appeared high while elk, antelope, bighorn sheep and mule deer populations seemed to be suffering. Yellowstone's top administration blamed the coyotes and thought they should be killed.<sup>16</sup> Roger Toll, Yellowstone's superintendent, strongly felt it was not predators, but elk, deer and antelope that were "the type of animal the park was for."<sup>17</sup>

To help resolve the issue Adolph Murie was assigned to Yellowstone for a two-year coyote study in 1937. His "*Ecology of the Coyote in the Yellowstone*" was groundbreaking in two ways: first, it was one of the first

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<sup>13</sup> Sumner, 14. Adolph Murie in Evison interview, 7.

<sup>14</sup> Sumner, 3.

<sup>15</sup> Chase, 23.

<sup>16</sup> Coyotes are capable of killing animals much larger than themselves.

<sup>17</sup> Chase, 124.

true ecological studies in the national parks and second, it was the first serious predator study in the Park Service's history.<sup>18</sup> Previous biological studies had essentially been surveys of existing conditions rather than interpretations of interrelationships.<sup>19</sup> Murie saw Yellowstone as a system of interrelated parts, each of which affected the others. Not only did he rely on long-established field methods of collecting and studying scat in his study, he incorporated environmental factors, history of the area, management influence, and relationships among animal species into his study.

Murie found that the problem for the big game species in Yellowstone was not one of predation, but of management policy. By killing predators to save their prey, the Park Service had enabled the elk population to overpopulate its winter range. The resultant overgrazing and depletion of the food supply harmed elk, deer, antelope and bighorn. Murie had shown that artificial disruption of the predator-prey dynamic had negative repercussions throughout the ecosystem. Yellowstone's new superintendent, Edmund Rogers, was so angry that Murie's conclusions blamed park management that he tried to have Murie fired.<sup>20</sup> Victor Cahalane (Wildlife Division director after George Wright's death) made sure Murie kept his job, but Murie's controversial report was shelved for at least a year. However, among Murie's peers in the Wildlife Division,

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<sup>18</sup> Cahalane, 235.

<sup>19</sup> Cahalane, 235.

<sup>20</sup> Olaus J. Murie, to Dr. Harold E. Anthony, 5 December 1945, Olaus J. and Margaret Murie Collection, box 1, American Heritage Center, University of Wyoming, Laramie. Edmund Rogers succeeded Roger Toll as Yellowstone's superintendent after Toll's death in the same car accident that killed George Wright.

Murie's findings were accepted and his reputation as a meticulous and talented scientist grew. Eventually Yellowstone followed Murie's recommendation and the long-accepted practice of predator control in the nation's first national park came to an end in the early 1940s.

Murie's coyote assignment once again demonstrated his comprehensive study methods and revealed his personal concepts of ecological management. He used his coyote conclusions to illustrate that parks should be preserved "in their natural condition for the enjoyment and study of present and future Americans. In line with high purpose, the fauna and flora should be subjected to a minimum of disturbance."<sup>21</sup> That statement showed the value Murie placed in natural areas being places for ecological processes to continue unhindered. It became part of Murie's wilderness ethic; he promoted this philosophy for national parks throughout his career.

### **Wolves of Mount McKinley**

Murie established his reputation as an investigative biologist with the coyote study and Victor Cahalane assigned him to the Park Service's next predator controversy – the wolves of Mount McKinley National Park. Having worked in McKinley Park sixteen years earlier as an apprentice biologist to his brother, Murie was thrilled with the assignment in his favorite place.

Wolves had been blamed for a decline in the park's Dall sheep populations throughout the 1930s. Official policy on killing wolves had been inconsistent and a serious controversy developed between those for

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<sup>21</sup> Adolph Murie, *Ecology of the Coyote in the Yellowstone*, Fauna Series no. 4 (Washington, D.C.: National Park Service, 1940).

and against predator control. Respected for his objective scientific methods, Murie was a good choice for the McKinley assignment. He was sent to the park to develop a strong science-based rationale for the park's wolf/sheep policy.<sup>22</sup> Murie's assignment was to determine whether wolf control was necessary to save the park's sheep from extirpation. As in his Yellowstone coyote study, he found himself faced with a park administration and sportsmen's organizations with strong anti-predator sentiment.

Since Dall sheep were instrumental in the park's establishment anything that threatened them was unpopular. Charles Sheldon, a big game hunter and guide with strong eastern political connections, came to interior Alaska in 1907 to collect specimens of Dall sheep for the American Museum of Natural History. He quickly recognized that Alaska's wildness and wildlife were not limitless. He was convinced that market hunters, who were already killing thousands of sheep a year, would decimate the plentiful animals of the Denali area. As the building of the Alaska Railroad neared, Sheldon made it his personal goal to see the Denali region become a national park.<sup>23</sup>

Mount McKinley National Park was established in 1917, the first national park founded on the basis of wildlife protection. All (thirteen) previous national parks had been established to protect their spectacular scenery or curiosities of nature, such as geysers, volcanoes and waterfalls. Some of them, Yellowstone in particular, included large and varied animal

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<sup>22</sup> Brown, 183. Though the results of Murie's study would be used politically, the Park Service hoped a scientific basis to their actions would give them more credence.

<sup>23</sup> Sheldon feared that market hunters would kill large numbers of animals to sell as meat to the Alaska Railroad construction crews.

populations, but the animals were peripheral to their designations as national parks. Though Mount McKinley National Park contained spectacular scenery, it was the drive to protect the Dall sheep from extirpation that inspired its founding.<sup>24</sup>

Murie arrived at the park on April 14, 1939 to begin his two-year study. He traveled by dog team to his base at the Sanctuary cabin, 22 miles into the park. During his first day he counted and classified 66 sheep by age and gender, identified wolf tracks and collected wolf scat containing sheep hair. The long process of gathering data had begun.

Once spring arrived, and the park road was clear of snow Murie moved to the Igloo cabin at Mile 33 for the summer. He continued his fieldwork until October, assisted by Emmett Edwards and Irwin Yoger, two Civilian Conservation Corps (CCC) enrollees. The park road, completed the previous year, passed through the heart of the sheep ranges, so during the summer Murie could drive to any point along the road and from there roam the adjoining sheep hills. He often had one of his assistants drop him at one point on the road where he would hike in a semicircle and be picked up 10 or more miles from the starting point. Before leaving for the winter he had hiked about 1,700 miles collecting data.<sup>25</sup>

Murie methodically collected large numbers of specimens such as wolf scat, sheep horns and carcasses. As in his Yellowstone coyote study, his research techniques were the best of his time. He used rigorous quantitative techniques, such as determining age in live and dead sheep from the visible annual rings in their horns. He considered the sheep's

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<sup>24</sup> Brown, 89.

<sup>25</sup> Adolph Murie, *The Wolves of Mount McKinley*, 3.

whole environment for clues to other factors (besides wolf predation) that could influence their population. He found weather, disease, accidents and the presence of a buffer caribou population to be some of the factors that were part of the overall picture.

By the end of his study, Murie acknowledged that heavy wolf depredation had reduced the sheep population in combination with several hard winters. But he also made a strong case that the sheep had reached “equilibrium” with the park’s wolf population – the wolves were no longer causing a net loss in sheep.<sup>26</sup> He concluded that when sheep numbers were low, wolves caused further declines by killing the old, the diseased and the young, as had happened after the severe winters at McKinley. Furthermore he thought such predation would benefit the sheep population by removing the weaker members of their population. He noted that if the wolf were capable of capturing sheep indiscriminately it would have long ago exterminated them.<sup>27</sup> The Park Service accepted Murie’s conclusions and terminated its wolf-control program at McKinley for the immediate time. But the wolf-sheep controversy continued for another decade as discussed further in Chapter two.

### **World War II changes Wildlife Division**

The start of World War II meant funding was cut back drastically in the National Park Service and most biologists’ positions were eliminated. In 1939 the entire National Park Service Wildlife Division was transferred to the United States Fish and Wildlife Service (USFW) and in 1942 the Division was completely disbanded. Adolph Murie was one of three (of the

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<sup>26</sup> Ecologists now consider “equilibrium” an over-simplistic concept.

<sup>27</sup> Adolph Murie, *Wolves of Mount McKinley*, 127, 230.

original 27) Park Service biologists kept on by the USFW to continue their biological work through the war years.<sup>28</sup> Murie went to Arizona to study cattle losses on the San Carlos Indian Reservation in 1943. Again coyotes were blamed, but Murie found that most of the cattle consumed by coyotes were already dead from other causes. A surprising feature of the coyotes' diet at San Carlos was the dominance of juniper berries. No one had previously documented a high intake of berries or other plant matter in the coyote diet. Murie found juniper berries in 68% of the 3981 coyote scats he collected and they "usually composed all or a large part of those in which found."<sup>29</sup> Finding such a high content of juniper berries instead of the usual rabbit and rodent remains meant the range was so poor it couldn't support populations of the smaller animals. This led Murie to conclude, as in his Yellowstone coyote study, that overgrazing (in this case by cattle) was the main problem.<sup>30</sup> After fifteen months in Arizona he had an attack of pernicious anemia, possibly a complication of the malaria he acquired in Belize a decade earlier. He returned to the family home in Jackson Hole, Wyoming to recover and write his report on the San Carlos coyotes.<sup>31</sup>

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<sup>28</sup> Sumner, 16, 24-25.

<sup>29</sup> Adolph Murie, "Coyote Food Habits on a Southwestern Cattle Range," *Journal of Mammalogy* 32, no. 3 (1951): 291-295.

<sup>30</sup> Adolph Murie, "Coyote Food Habits," 295.

<sup>31</sup> Louise Murie MacLeod conversation with author, 8 October 2003, Jackson, Wyoming.



### *Wolves of Mount McKinley* gains attention

*The Wolves of Mount McKinley* was published in 1944.<sup>32</sup> As the first in-depth study of wolves anywhere, it received substantial attention from wildlife biologists.<sup>33</sup> Biologists immediately lauded it as an impeccable wildlife study, praising Murie's research and writing.<sup>34</sup> Even some biologists who had once fully supported predator control were convinced by Murie's study. Clarence Cottam, chief of the Biological Survey from 1935 to 1940, cited Murie's work as evidence that wolves had a function and should be saved.<sup>35</sup> Murie himself recognized that his book had "a deep-seated influence on conservation thinking throughout the nation" because it was used in universities where future conservationists were taught.<sup>36</sup> Esteemed wildlife scientist and philosopher Aldo Leopold was among the professors who used Murie's work as a stellar example of a classic wildlife study.<sup>37</sup> After positive reviews for *The Wolves of Mount McKinley* came out in several magazines including *Audubon* and *Natural History*, Murie's book gained a popular following.<sup>38</sup>

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<sup>32</sup> Adolph Murie, *The Wolves of Mount McKinley*, Fauna Series No. 5 (Washington D. C.: U.S. Government Printing Office), 1944.

<sup>33</sup> A few other books and articles had been written about wolves, but none were scientific studies of wolves. For example, Ernest Thompson Seton published many wildlife books that included stories about wolves and Stanley Young published a historical account, *The Wolves of North America*.

<sup>34</sup> Rawson, 184. See Rawson, chap. 6, for further discussion of the importance of Murie's wolf book.

<sup>35</sup> Dunlap, 128.

<sup>36</sup> Adolph Murie to Lowell Sumner, Moose, Wyoming, 9 January 1951, Adolph Murie Collection, box 4, American Heritage Center, University Of Wyoming, Laramie.

<sup>37</sup> Adolph Murie to Sumner.

<sup>38</sup> Richard Pough review of *The Wolves of Mount McKinley*, by Adolph Murie, in *Audubon* (January-February 1945): 58. Harold Anthony, review of *The Wolves of Mount McKinley*, by Adolph Murie, in *Natural History* (January 1945): 46.

*The Wolves of Mount McKinley* became basic reading for every new ranger at McKinley Park. Most then shared Murie's perspective in interpretive programs at the park hotel. In addition to his detailed analysis of the ecology of the wolf, Murie had purposefully written his book to gain sympathy for the wolf. Murie later described his efforts:

I concentrated on its home life, along with other phases of its life history, in order to change wolf-hatred to a more generous attitude, not only in the public but among Service employees. Here esthetics are involved, a 'reverence for life,' and the fundamentals of park philosophy.<sup>39</sup>

By depicting wolves as interesting animals with strong family bonds, Murie successfully created a new positive image of wolves.<sup>40</sup> Since wolves were associated with wilderness, his wolf book also contributed to growing wilderness preservation sympathies. Murie's basic premise that everything in the natural world is related gradually received notice.

Although it would take several more years for the shift toward ecologically informed wildlife management at Mount McKinley National Park to become a reality, Murie's study played the key role in helping the park's administration understand the value of all wildlife. Nature writer Rick McIntyre noted that it was Murie who "more than any other

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<sup>39</sup> Adolph Murie, to Regional Director, Western Region, 7 March 1963, Adolph Murie Collection, temporary box 3, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>40</sup> See Rawson, chap. 6, for more on Murie's influence on popular media.

individual, changed the way park managers perceived wolves and other predators.”<sup>41</sup>

Victor Cahalane sent Murie back to McKinley to check on the sheep/wolf situation in 1945.<sup>42</sup> The territorial legislature and sportsmen’s organizations were still angry about the end of wolf control four years before. According to historian William Brown, “The sheep, given Charles Sheldon’s interest in them, symbolized the park for the game-protection groups that had worked so hard for its establishment.”<sup>43</sup> With an apparent further decline in sheep numbers since Murie’s original wolf study, they had developed a more extreme position - they wanted all wolves in McKinley Park to be removed.

When Murie returned, it appeared another severe winter had again reduced the sheep population. Murie admitted the sheep population had reached an all-time low and recommended killing ten to fifteen wolves (limited wolf control) to allow the sheep population to recover. The difference between Murie’s recommendation for limited wolf control and the anti-wolf faction’s desire for killing all wolves was a “distinction between beneficial, manipulative control to rectify an extreme natural situation, and the atavistic drive to exterminate wolves as a malignant species” as Bill Brown stated it.<sup>44</sup> Murie’s recommendations were less than heartfelt: he believed in letting nature take its course. But with the anti-wolf faction trying to override the Park Service and obtain congressionally

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<sup>41</sup> McIntyre, 90.

<sup>42</sup> Adolph Murie, San Carlos, Arizona to Victor Cahalane, Chicago, 27 December 1943, Adolph Murie Collection, temporary box 9, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>43</sup> Brown, 180.

<sup>44</sup> Brown, 184.

mandated wolf control, he apparently thought it necessary to sacrifice a few wolves to prevent all-out slaughter.<sup>45</sup>

The introduction of H.R. 5004 in Congress in December 1945 brought the wolf/sheep issue to a head. The bill would mandate strict control of wolves and other predators in Mount McKinley National Park. Well-known voices took stands on each side of the issue, and Aldo Leopold “argued that Adolph Murie, ‘widely respected as one of the most competent men in his profession,’ was far better prepared to deal with this issue than was Congress.”<sup>46</sup>

When Murie returned to McKinley Park again in 1946 to check on the situation, he found a healthy lamb population. He maintained the lower sheep numbers continued to be a result of the sheep die-off in the early 1930s (which left a disproportionate number of sheep in certain age cohorts). He expressed confidence in the sheep’s ability to recover:

The mountain sheep in McKinley Park has been on its own, they have not been coddled, they are maintaining their primitive ways, they are sturdy representatives of a highly picturesque mountain dweller. This should give some assurance that they will survive the recent set-back.<sup>47</sup>

The wolf/sheep controversy continued to gain extensive notice among politicians, sportsmen’s groups, universities and conservationists.

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<sup>45</sup> Bill Nancarrow, interview by author, Deneki Lakes, Alaska, 6 March 2003. Rawson, 237.

<sup>46</sup> Aldo Leopold to J. Hardin Peterson, 13 June 1946, quoted in Sellars, 160.

<sup>47</sup> Adolph Murie, “Wolf-Mountain Sheep Relationships in Mount McKinley National Park, Alaska - 1946,” unpublished government report, 17 December 1946, Adolph Murie Reference File, Denali National Park and Preserve Museum.

The threat of a legislatively mandated solution continued until 1947 when Interior Secretary Julius A. Krug recommended against the pro-wolf-control bill.

Because Krug promised that the Park Service would practice wolf control as needed to protect the Dall sheep, McKinley Park needed a resident biologist to monitor the status of wolves, Dall sheep, and caribou.<sup>48</sup> Adolph Murie got the job and went to work year-round at McKinley Park in 1947. As part of his duties, Murie was in charge of the wolf reduction effort which enabled him to “be selective about which wolves would be sacrificed to the politics of wildlife management.”<sup>49</sup> As former park ranger Bill Nancarrow explained, “Ade knocked off a couple of wolves just so they wouldn’t send Fish & Wildlife to start killing them. But they were old decrepit wolves.”<sup>50</sup>

Murie paid close attention to the sheep and wolf populations. He documented the rebounding Dall sheep population, and noted how scarce wolves had become in the park (both population changes were due to a variety of circumstances unrelated to Park Service wolf control).<sup>51</sup> The official big-game bias (at the expense of predators) at Mount McKinley National Park came to an end in 1952 when NPS Director Conrad Wirth instituted a ban on wolf killing.<sup>52</sup> Though Mount McKinley National Park had been founded on the basis of animal protection, it had taken thirty-five years for all animals to receive equal protection within the park.

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<sup>48</sup> Brown, 184.

<sup>49</sup> Rawson, 237. See Rawson’s book for more on Murie’s part in the wolf control effort.

<sup>50</sup> Nancarrow interview.

<sup>51</sup> See Rawson, chap. 8, for the other factors contributing to lower wolf numbers.

<sup>52</sup> Brown, 184.

### Family ties and home life

Family and home gave Murie an important base throughout his professional life. When he went to Alaska to begin his wolf study, Louise stayed behind in Jackson, with their four-year-old daughter Gail, to await the birth of their second child. Upon his return from Alaska in 1939 Adolph met his infant son Jan Olaus. The next spring the whole family traveled to McKinley Park and the East Fork cabin became their home. For Louise it was a return to interior Alaska where she had spent her first 13 years. She managed domestic life for the family at their remote cabin and began her lifelong pursuit of botany.

The two Murie families (Adolph and Louise and Olaus and Mardy) bought the 77-acre STS ranch on the Snake River near Moose, Wyoming in 1945.<sup>53</sup> Adolph and Louise moved into the original homestead cabin immediately. It would be their home base for the next thirty years even as they held long assignments in Alaska and other places.

The Muries stayed in Alaska for the three years of Adolph's year-round assignment to Mount McKinley, 1947 to 1950. They lived at the Igloo cabin in the summers and spent winters at park headquarters with the few other year-round employees.<sup>54</sup> Louise home-schooled the children while Adolph continued his wildlife studies. Bill Nancarrow, a new park ranger, sometimes accompanied Adolph on his multi-day winter forays.<sup>55</sup> Bill speculated that Adolph probably wrote more words each evening in his diary than he (Adolph) had spoken all day.

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<sup>53</sup> The Murie Ranch now houses the non-profit Murie Center and is part of Grand Teton National Park.

<sup>54</sup> Jan Murie. The Murie family spent their first winter in Alaska in Otto Geist's cabin on the edge of Fairbanks and the next two winters at park headquarters.

<sup>55</sup> Bill Nancarrow.

As the sheep/wolf crisis subsided, the Park Service reassigned Murie to Grand Teton National Park in 1950 to study the distribution and migration of the Jackson Hole elk herd.<sup>56</sup> Once again the family took up residence in their home next door to Olaus and Mardy and the two brothers resumed their collaboration on ideas and papers. Olaus had become the national director of the Wilderness Society in 1945 and during Adolph and Louise's three years in Alaska the Murie Ranch had become a center for Wilderness Society meetings. From Mardy's perspective it was also a gathering place "for every conservationist or friend of a conservationist, every biologist or friend of a biologist...who happens to be traveling through Jackson Hole."<sup>57</sup>

Back at home at the Murie ranch after the relative isolation of McKinley Park, Adolph enjoyed the opportunity to exchange ideas with visitors who included the leading conservationists of the time. A decade later, Adolph would draw upon his relationships with Howard Zahniser and Sigurd Olsen for assistance in advocating for McKinley Park's wilderness values. The Wilderness Society regulars valued Dr. Murie (Adolph) for his work as a wildlife biologist. They appreciated his instrumental work in changing federal agency policies toward natural ecosystems. They also knew him as a valuable consultant and research biologist on Wilderness Society issues since the Society's start in 1935.<sup>58</sup>

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<sup>56</sup> Adolph Murie, memo to Regional Director Western Region, 7 March 63, Adolph Murie Collection, temporary box 2, Alaska and Polar Regions Collection, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>57</sup> Margaret and Olaus Murie, *Wapiti Wilderness* (Boulder: University of Colorado Press: 1985), 281.

<sup>58</sup> Adolph Murie, to Robert Sterling Yard, 15 January 1935, Adolph Murie Collection, box 4, American Heritage Center, University of Wyoming, Laramie.

### Murie dedicates himself to Mount McKinley National Park

Murie felt refreshed by the supportive discussions of his work and reported a “strengthened perspective” on his McKinley wildlife studies. He decided Mount McKinley National Park was the place he wanted to devote the rest of his career.<sup>59</sup>

When the Park Service wanted to send Murie to Olympic National Park for a cougar study similar to his wolf study he turned it down. It would have been a promotion and Olaus Murie encouraged his brother to take it. “If you could put out a publication on the Olympics, featuring the cougar as well as you did the wolf”, Olaus wrote, “you will certainly have made a big mark in the conservation world.”<sup>60</sup>

Adolph Murie wanted to continue his McKinley studies instead, and that passion made him unenthusiastic about new opportunities. George Collins, head of the new Alaska Recreation Survey, asked Murie to join him as part of the survey team. The survey’s purpose was to develop long-range plans for protection and development of Alaska’s scenic, scientific, historic and other recreational resources. It would be a four-year effort to inventory recreational resources in Alaska. Murie agreed to participate in the survey before his next field season at McKinley, but asked to be released from the extended duty so he would be able to return to McKinley each year.<sup>61</sup>

Murie spent two months with the Recreation Survey in the spring of 1951, traveling through southeastern Alaska, Prince William Sound and the Kenai Peninsula. Murie found the survey region “wild, beautiful, and

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<sup>59</sup> Adolph Murie, to Sumner.

<sup>60</sup> Olaus Murie, to Adolph Murie, 21 March 1951, Martin Murie Collection.

<sup>61</sup> Adolph Murie, to Sumner.



mysterious” and knew of “no experience more impressive than Ford’s Terror” (an inlet of Endicott Arm, now part of Tracy Arm – Ford’s Terror Wilderness).<sup>62</sup> He realized all the recreational values of the region had to be noted for recognition, but his emphasis was protecting the natural features. He thought the most important recreational value probably came from “the mere presence of the natural countryside.”<sup>63</sup> In the conclusions to his report he made a strong statement of Alaska’s value:

Let us remember that the very existence of Alaska is recreation for everyone who has ever heard of Alaska, whether or not he has ever seen it. To these millions, Alaska will spell recreation to the imagination if it is preserved.<sup>64</sup>

Murie went on to McKinley Park after his Recreational Survey stint that spring. He had worked out an arrangement with Lowell Sumner, the Park Service’s principal biologist (as well as personal friend and Wright-era biologist) to return to McKinley as needed to monitor wildlife situations there. Murie believed long-term field programs became more valuable the longer they continued so his definition of “as needed” meant making it a priority to return to Alaska as often as possible.<sup>65</sup> The Muries returned to McKinley Park every other summer in 1951, 1953, and 1955 and then again in 1956.

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<sup>62</sup> Adolph Murie, *A Report on the 1951 Recreational Survey of Southeastern Alaska, Prince William Sound, and the Kenai Peninsula* (United States Department of the Interior, National Park Service, Region IV, 1952), 43.

<sup>63</sup> Adolph Murie, *1951 Recreational Survey*, 42.

<sup>64</sup> Adolph Murie, *1951 Recreational Survey*, 49.

<sup>65</sup> Adolph Murie, memo to Regional Director, 7 March 63, 2. Most of the information in this paragraph is from this document.

Dr. Murie was the only biologist at McKinley Park and he took his responsibility seriously. He wanted to stay abreast of the sheep, wolf and caribou populations, while also studying other park mammals. Much of his work was routine data gathering such as the size of the caribou herd and estimating annual calf and lamb percentages. He also continued intensive observations of grizzly bears that he had begun in 1950, and gathered detailed data on other species as opportunity arose. In 1955 and 1956 he concentrated on the lynx since it was the first time in Murie's years at the park that they were abundant.<sup>66</sup>

Every summer he accumulated hundreds of pages of field notes, with the intent to turn them into bulletins (government-sponsored books) on the mammals, birds and flora of the park.<sup>67</sup> Instead, through the mid-1950s, he channeled his writing efforts into articles for popular conservation magazines such as *Living Wilderness* (see appendix C, Publications of Adolph Murie). He hoped these articles would help people appreciate wildlife. Besides furnishing scientific answers in his writings, he sought to “contribute to them prestige and envelop them with a philosophical setting.”<sup>68</sup> He was an advocate of both the tangible and intangible benefits of wild nature. In a letter defending his own work later in his career he explained his approach:

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<sup>66</sup> The lynx population cycles over about 8 to 11 years from its highest numbers to its lowest to highest again.

<sup>67</sup> It wasn't until the early 1960s that Murie published these bulletins as *Mammals of Mount McKinley National Park* (1962) and *Birds of Mount McKinley National Park* (1963). See Appendix 1, Publications of Adolph Murie, for the full chronology of his published works.

<sup>68</sup> Adolph Murie, to Regional Chief of Interpretation, 18 January 1962, “not officially submitted, personal” written in margin, Adolph Murie Collection, temporary box 3, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

In addition to the gathering of annual statistics and observations in relation to the stated objective of the original field studies, I have always felt that there was something else for which to strive. In my work I have tried to be especially alert for observations that would create interest in the park idea and humanize man's attitude toward wildlife.<sup>69</sup>

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<sup>69</sup> Adolph Murie, to Regional Chief of Interpretation, 18 January 1962, 2.

### CHAPTER THREE: MURIE'S WILDERNESS VALUES AND MISSION 66

This chapter details the way Murie drew attention to the conflict between protecting Mount McKinley National Park's wilderness values and developing the park for public use. It explains the national Mission 66 program as a context for Murie's efforts to stop development projects at McKinley Park. To a large extent it was Mission 66 that transformed Adolph Murie from a superb scientist with a strong personal wilderness ethic to a determined and effective advocate for the park's wilderness values.

#### **Mission 66: facilities for travelers in cars**

In 1955 National Park Service Director Conrad Wirth proposed an ambitious program to upgrade and build new visitor facilities throughout the national park system. The program's goal was to bring all units of the park system to consistently high standards of preservation, staffing and physical development in time for the National Park Service's fiftieth anniversary in 1966. Thus the decade-long program was named Mission 66. Many thought this massive development plan was needed to restore the national parks' degraded infrastructure caused by neglect during the years of the depression and World War II.

After World War II, the new prosperity of the middle class permitted widespread car ownership and paid vacations. Newfound mobility developed along with interest in outdoor recreation. National parks, with

facilities designed for the 17 million visitors of 1940, were quickly overwhelmed by 54 million visitors a year by 1954.<sup>1</sup>

A magazine article by Bernard DeVoto, one of the most influential columnists in American journalism, brought attention to the national parks' plight.<sup>2</sup> Entitled "Let's Close the National Parks," DeVoto used colorful language to illustrate the need to remedy shabby park conditions:

The Service is like a favorite figure of American legendry, the widow who scrapes and patches and ekes out, who by desperate expedients succeeds in bringing up her children to be a credit to our culture... But it stops there, short of the necessary miracle...So much of the priceless heritage which the Service must safeguard for the United States is beginning to go to hell.<sup>3</sup>

DeVoto's article created a stir among public officials while similar articles in popular magazines such as *Readers' Digest* further spread the concern to the general public.<sup>4</sup> NPS director Wirth easily won Congressional support for his Mission 66 proposal by including expenditures in every Congressional district that had a National Park or Monument.

The Mission 66 plans included construction of new utility systems, employee housing, and training centers in the parks. But the bulk of the

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<sup>1</sup> William C. Everhart, *The National Park Service* (New York: Prager Publishers, 1972), 135.

<sup>2</sup> Bernard DeVoto wrote the Easy Chair column in *Harper's Magazine* for twenty years.

<sup>3</sup> Bernard DeVoto, "Let's Close Our National Parks," *Harper's Magazine* 207 (October 1953): 49-52.

<sup>4</sup> Charles Stevenson, "The Shocking Truth about our National Parks," *Readers' Digest* 66, no. 66 (January 1955): 45-50.

proposals were for facilities for the traveling public. Modernism and efficiency became important to park managers for the first time with Mission 66.<sup>5</sup> Visitor centers were designed to give park visitors all the information they needed in a centralized location. Planners envisioned new and reconstructed roads to allow greater numbers of visitors to see the parks more easily. Adding visitor centers, overnight accommodations, and picnic areas would maximize enjoyment from the comfort of one's own car. Tellingly, the American Automobile Association (AAA) co-sponsored the Mission 66 kickoff dinner in February 1956.<sup>6</sup>

Within the Park Service, Mission 66 was an exciting time. It increased staffing levels and improved employees' working and living conditions. It was widely welcomed by all but the biologists. Just as park infrastructures had deteriorated since the start of World War II, so had the biological programs. Despite a stated commitment to biological research in the Mission 66 goals, the program failed to provide any additional financial support to science in the parks. Mission 66's emphasis on infrastructure development while neglecting the science program caused the Park Service's chief biologist Victor Cahalane, to resign in frustration. Having led the wildlife biologists since George Wright's death nearly twenty years before, Cahalane "had the feeling biology had too long been ignored."<sup>7</sup>

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<sup>5</sup> Sara Allaback, *Mission 66 Visitor Centers, the History of a Building Type* (Washington D.C.: U.S. Department of the Interior, 2000).

<sup>6</sup> Alfred Runte, *National Parks, the American Experience*, 3d ed. (Lincoln: University of Nebraska Press, 1997), 176.

<sup>7</sup> Victor Cahalane in Lowell Sumner, "Biological Research and Management in the National Park Service: A History," *The George Wright Forum* (August 1983): 17.

Despite the general consensus that national park facilities needed renovations, Mission 66 encountered public criticism from the start. Many objected to specific development plans such as the new architectural styles for visitor centers. The Modernistic designs turned away from “park rustic,” the popular style that emphasized natural materials and harmony with the natural landscape.<sup>8</sup> Wider criticism focused on suspected over-projections of future visitation and on the near-deification of the automobile. Social critic Joseph Wood Krutch typified the less-supportive view of Mission 66 by noting that instead “of valuing the automobile because it may take one to a national park, the park becomes valued because it is a place the automobile may be used to reach.”<sup>9</sup>

#### Preservation versus use

Nothing in the original Mission 66 summary mentioned the value of wilderness in the national parks. That changed after Wilderness Society Director Howard Zahniser and Sierra Club President David Brower met with Conrad Wirth in December 1957. They asked for a revised Mission 66 statement that would include a statement of continued unaltered preservation of wilderness areas within the park system. Wirth agreed and wilderness preservation became part of the stated Mission 66 purpose.<sup>10</sup> But conservationists were still alarmed at the emphasis on recreational development at the expense of preservation. They were especially

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<sup>8</sup> Allaback.

<sup>9</sup> Joseph Wood Krutch, “Which Men? Which Needs?” *American Forests* 63 (April 1957): 23.

<sup>10</sup> David R. Brower, “Mission 65 (sic) is Proposed by Review of Park Service’s New Brochure on Wilderness,” *National Parks Magazine* 32, no. 132 (January 1958): 3-6, 45-48.

concerned about the amount of road construction and the encroachment of roads into wilderness areas. The Park Service then published a color brochure called *The National Park Wilderness* to portray Mission 66 as a wilderness preservation program. The brochure emphasized the importance of wilderness in national parks while justifying development to serve visitors, but it did not reassure the conservationists.

The volume and intensity of public concern for wild lands was unprecedented in the mid-1950s. The Wilderness Act, intended to establish a national wilderness preservation system, was introduced in Congress in 1956 - the same year Mission 66 started. To Roderick Nash, the Wilderness Act signified the first time the American conservation movement went on the offensive after a history of defensive reactions to development plans.<sup>11</sup> The authors of the Wilderness Act saw the purpose of wilderness as places to be “managed as to be left unmanaged - areas that are undeveloped by man’s mechanical tools and in every way unmodified by his civilization.”<sup>12</sup> David Brower noted that conservationists hoped the Wilderness Bill “would proceed hand in hand with the developing Mission 66” to strengthen determinations the Park Service would be making for “mechanized visitation” versus “wilderness wandering.”<sup>13</sup>

The Mission 66 conflict between public use and wilderness protection was one of many conflicts that have arisen over the years from

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<sup>11</sup> Roderick Nash, *Wilderness and the American Mind* Third Edition. New Haven: Yale University Press, 1982/1967: 222.

<sup>12</sup> Howard Zahniser, “The Need for Wilderness Areas,” *Living Wilderness* 59 (Winter-Spring 1956-57), 37.

<sup>13</sup> Brower, 3-4.



the dual mandate of the Organic Act of 1916 establishing the National Park Service. The Act directs the Park Service:

to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.<sup>14</sup>

Providing for enjoyment of parks while leaving them unimpaired has been a balancing act for the Park Service, because visitation can destroy the very qualities (e.g., scenery, wildlife, wilderness) the parks protect.

In the early decades of the Park Service there was little conflict over the dual mandate of the Organic Act because providing access to the parks in the form of new roads and facilities was sought by the NPS and uncontested by the public. The objective was to get people to visit the parks in order to establish a broad base of support for the young NPS; the possibility of too much visitation was unimaginable. Park visitors became a constituency with political influence that helped secure the parks' protected status when they were threatened by outside resource exploitation proposals such as mineral extraction. Mission 66 reclaimed the early NPS priorities of opening up the parks for public use. One of its precepts was the idea that "public use, benefit, and enjoyment of a park is the best protection" from major threats of adverse use or encroachment.<sup>15</sup>

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<sup>14</sup> Alfred Runte, *The American Experience* (Lincoln: University of Nebraska, 1979), 104.

<sup>15</sup> Conrad Wirth, "Mission 66," *American Forests* (August 1955): 16-17.

### **Mission 66 plans for Mount McKinley National Park**

In Alaska, interest in development and tourism surged after the war. Construction of the Alaska Highway during World War II connected Alaska to the rest of the North American road system. The anticipated opening of the Denali Highway in 1957 would connect the McKinley Park road to the outside world for the first time. The Denali Highway would come 145 miles east from Paxson on the Richardson Highway to Cantwell, then 25 miles north to McKinley Park (Figure 1).

Prior to 1957 the only way to reach the park was via the Alaska Railroad from Fairbanks or Anchorage. Most visitors arriving at the park by train stayed at the park hotel, a short walk from the train station, and traveled deeper into the park in the concessionaire's touring cars. A small percentage of summer visitors loaded their automobiles onto special train cars for the trip to the park. The 1952 Governor's report noted that 8,634 visitors came to Mount McKinley National Park that year, but only fifty private automobiles were shipped to the park.<sup>16</sup>

Once at the park, those hardy visitors with their own cars traveled the primitive park road at their own pace, stayed at the campgrounds along the park road (Teklanika at Mile 28, Toklat at Mile 53, and Wonder Lake at Mile 85).<sup>17</sup> Ginny Wood was one of the regulars on the park road from 1952 to 1977. As one of the co-owners of Camp Denali, a rustic lodge at the end of the park road, she remembered there were so few other people on the park road in the 1950s that the Camp Denali staff would eventually meet everyone visiting the park who drove the road.

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<sup>16</sup> Report of the Governor of Alaska, 1952 (section titled "National Park Service," no page number), DENA.

<sup>17</sup> Ginny Hill Wood, conversation with author, Fairbanks, Alaska, 30 August 2002.

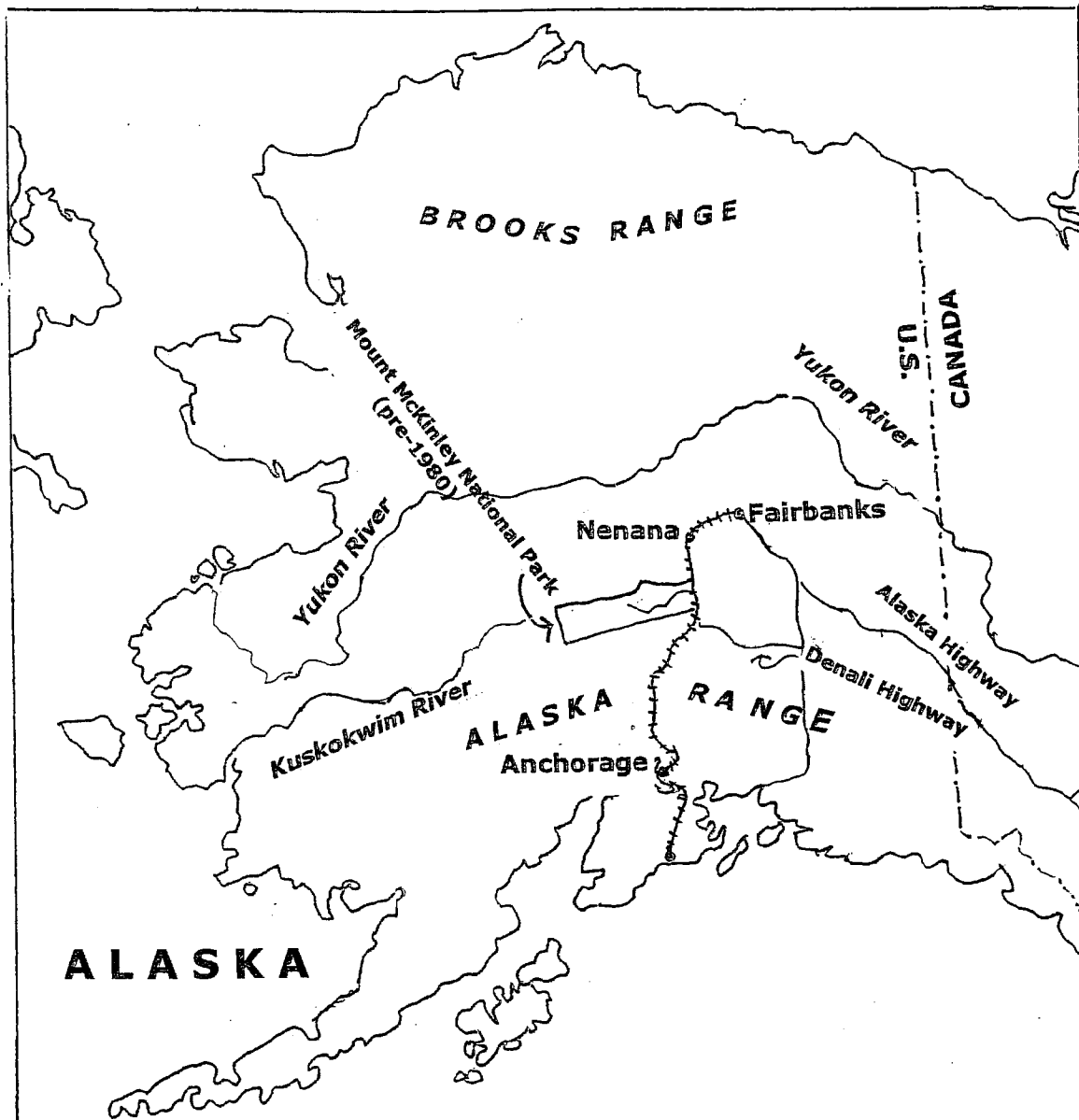


Figure 1 - Map of Alaska

The McKinley Park road had changed little since its completion in 1938. In the mid-1950s it was still a single lane dirt road with occasional pullouts. Though it was navigable by the hotel's four touring vehicles and the low numbers of private vehicles, the park administration and the Bureau of Public Roads (BPR) thought the narrow and winding park road inadequate for the large influx of motorized visitors about to arrive via the new Denali Highway. With Alaska about to become a state, Alaska's only national park was an obvious choice for Mission 66 improvements.<sup>18</sup>

The Mission 66 plans included realignment, straightening, widening and building up the entire length of the park road to federal highway standards.<sup>19</sup> In keeping with the national Mission 66 goals, the McKinley plans emphasized facilities to encourage and accommodate the projected flood of visitors in cars. In addition to major road upgrades, the plan included visitor centers and wayside exhibits (interpretive signs, readable from a car). New trails were also part of the plan for the still-trailless park: five backcountry trails (including one to remote McGonagall Pass in the Alaska Range, complete with shelters and a bridge over the McKinley River) and four short self-guided trails near the park entrance. Expanded campgrounds, relocation of the park hotel from the park entrance to a hillside above the Savage River (Mile 14), and new administrative structures and utilities were also in the plans. At Wonder Lake near the

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<sup>18</sup> Katmai and Glacier Bay National Monuments (established in 1918 and 1925) and Sitka National Monument (1910) were the only other National Park Service lands in Alaska until 1980.

<sup>19</sup> "Mission 66 Prospectus, Mount McKinley National Park," April, 1956. Technical Information Collection, Denver Service Center, MPNAR accession for MOMC #184.

west end of the park road the plans recommended a gas station, store and café.<sup>20</sup>

### **Murie's criticism of Mission 66 proposals**

Adolph Murie was immediately alarmed by the Mission 66 proposals for McKinley Park. He considered the proposed so-called improvements to be intrusions - intrusions that would threaten the integrity of the park. Murie's journal entries that summer made his feelings on Mission 66 planning clear as he wrote of both the tangible and intangible values of wilderness: "The point in all planning for McKinley is not to think up things to intrude in the park, but ways of preventing any intrusions...We have a sacred area. Let us touch it as little as possible."<sup>21</sup> He was cynical about the planners' vision of McKinley Park's future as a conventional national park similar to Yellowstone:

At McKinley an effort is being made to dress things up like an Outside park. Planners are in a rut. People not familiar with planning except for urban living are in the saddle. Their plans call for money, and projects - therefore they are listened to.<sup>22</sup>

Preservation of wilderness values was Murie's biggest concern:

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<sup>20</sup> *Jessen's Weekly*, newspaper, (Fairbanks, 28 March 1958), 8.

<sup>21</sup> Adolph Murie, journal entry, 8 September 1956. Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>22</sup> Adolph Murie, journal entry, 8 September 1956.

Because McKinley is a wilderness within a vast northern wilderness, the ill effect of any intrusion will here be proportionately greater; and any “dressing up” will be more incongruous, will clash more with the wilderness spirit...and since wilderness is recognized as one of the foremost values in the Park, it must be given special consideration in order to maintain its purity.<sup>23</sup>

Murie tried to give input to the Mission 66 field inspection team that visited McKinley the summer of 1956 but he claimed they were not interested in his views.<sup>24</sup> Murie stewed over the proposals all summer, and that autumn sent a 14-page critique of the Mission 66 development plans for McKinley Park to Duane Jacobs, the park’s new superintendent.<sup>25</sup>

In his critique Murie fully revealed the depth of his purist views on McKinley Park’s wilderness values and outlined his vision of appropriate development:

...our big task is to preserve this wilderness spirit...Some will seek ends that are destructive to the wilderness feeling, believing that their ends justify the additional intrusion. Some will think the highway should be intensively labeled like a museum, even though each label will detract from the

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<sup>23</sup> Adolph Murie, journal entry, 8 September 1956.

<sup>24</sup> Adolph Murie, to Red.

<sup>25</sup> Adolph Murie, “Comments on Mission 66 Plans, and on Policies Pertaining to Mount McKinley National Park,” (hereafter called “Mission 66 plans”), 14-page critique attached to Adolph Murie letter to Superintendent, Mount McKinley National Park, 8 November 1956, Adolph Murie Reference File, Denali National Park and Preserve Museum.

wilderness. Some will want to bring accommodations into the midst of the scenery, instead of a simple and delicate approach from the edge of things. Some will want to have structures on a prominence, rather than tucked away unobtrusively.<sup>26</sup>

Murie expressed confidence that through careful planning “McKinley can become a model in our attempt to use an area and still preserve its wilderness character.”<sup>27</sup> He thought McKinley Park’s expansive wilderness set it apart from other national parks and believed it was the crucial time for keeping McKinley from becoming like all the others:

Here is a major park, considered by many the most outstanding in the entire park system. We are about to make decisions which can, if they are faulty, mar, and for some, even destroy the spirit of the region.<sup>28</sup>

Though Murie was a scientist, all of his commentary on Mission 66, whether critical of existing plans or creatively suggesting new perspectives, focused on preserving McKinley’s intangible wilderness values. He even mentioned in his critique that it would not “tax our ingenuity” to save the park’s physical features, flora and fauna, “however, in all of them there is a wilderness spirit that concerns us...our big task is to preserve this wilderness spirit.”<sup>29</sup>

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<sup>26</sup> Adolph Murie, “Mission 66 plans,” 2.

<sup>27</sup> Adolph Murie, to Superintendent, Mount McKinley National Park, 8 November 1956. Adolph Murie Reference File, Denali National Park and Preserve Museum.

<sup>28</sup> Adolph Murie, “Mission 66 plans,” 1.

<sup>29</sup> Adolph Murie, “Mission 66 plans,” 2.

The only hotel in the park existed near the railroad station when Mission 66 planners recommended a new lodge be built twelve miles into the park near the Savage River. Their justification was the spectacular distant view of Mount McKinley, given that it could not be seen from the existing hotel. Some Alaskans also favored the site because they wanted a road from Fairbanks to come through the Savage River Canyon. It would be the first road connection between Fairbanks and McKinley Park.<sup>30</sup> Murie thought having a view of Mt. McKinley from the proposed hotel “could hardly justify the gross intrusion proposed for Savage River.”<sup>31</sup> Likewise, he found the idea of another road into the park completely objectionable: “Instead of planning for such a road it would be far better to begin opposing it.”<sup>32</sup> In his journal he lamented, “Can we not do something different this time? Rather than make a lodge at Savage the center of thought and planning and a monument to somebody, why not expand the thought on how to preserve the area.”<sup>33</sup> He thought any development near the Savage River would only detract from the area’s natural appeal.

He emphasized keeping the park hotel in its current location near the train station since it was the only developed area in the park.<sup>34</sup> He suggested putting a museum and new primitive campground near the existing hotel where facilities and programs would be in walking distance of campers. He was in favor of the plan to expand Teklanika Campground

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<sup>30</sup> Art Hehr, to Adolph and Louise, 15 May (no year, probably 1957 or 1958), Adolph Murie Reference File, Denali National Park and Preserve Museum. The only hotel in the park was one at the park entrance, completed in 1938-9.

<sup>31</sup> Adolph Murie, “Mission 66 plans,” 3.

<sup>32</sup> Adolph Murie, “Mission 66 plans,” 3.

<sup>33</sup> Adolph Murie, journal entry, 8 September 1956.

<sup>34</sup> The park hotel remained at its park entrance location until it was removed in 2001.



since it was inconspicuous and had space to grow. The Wonder Lake Campground had just been completed the year before, but it was on top of a knoll and Murie thought it should be relocated to a less prominent spot.

Murie thought all campgrounds and developments should be tucked away in sheltered or inconspicuous places. He classified the proposed interpretive shelter at Polychrome Pass (mile 45), a prominent overlook, as unnecessary. Murie opposed it on two grounds: that such a spectacular area should be left in its near-natural state and that educational exhibits were out of place along a wilderness road. He strongly believed that “educational exhibits compete with the natural scene, and replace the inspirational with classroom spirit.”<sup>35</sup>

An extensive plan for roadside interpretive signs particularly bothered Murie for the same reasons: “Educational signs should be located in museums or developed areas, and not in the wilderness.”<sup>36</sup> He felt that signs were “incongruous and highly intrusive,” marring the landscape while representing “poor pedagogy.”<sup>37</sup> He thought tourists should be left on their own to experience McKinley’s wilderness, without being told what to appreciate: “The thing becomes cut and dried; freshness is destroyed, and no mystery is left to wonder about. We kill rather than arouse curiosity.”<sup>38</sup> He thought by doing their own looking and exploring, people were more likely to discover “...the magic of wilderness. Some may not catch much, but if we clutter the road with ‘devices’ the magic will be

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<sup>35</sup> Adolph Murie, “Mission 66 plans,” 4.

<sup>36</sup> Adolph Murie, “Mission 66 plans,” 4.

<sup>37</sup> Adolph Murie, “Mission 66 plans,” 4, 7.

<sup>38</sup> Adolph Murie, “Mission 66 plans,” 7.

there for no one.”<sup>39</sup> He admitted that his view against educational signs bordered on iconoclastic: “This I realize is contrary to highly cherished ideas.”<sup>40</sup> Years later in his own journal he was more blunt: “Facts on billboards die. The sign program is typical of a scoutmaster who has never been in the woods.”<sup>41</sup> To Murie, the mere presence of roadside signs clashed with the “delicacy of the atmosphere at McKinley:”

Does the fact that some folks, perhaps mainly the idly curious, like the signs, justify harming the wilderness quality? Does the fact that an educational sign or exhibit on the roadside gives some information, justify its intrusion?<sup>42</sup>

The sign issue signified a “fight to preserve certain values, a certain natural splendor of life” to Murie.<sup>43</sup>

Murie considered the proposal for backcountry trails another unnecessary intrusion. Murie had hiked thousands of miles in the park without trails, and considered the terrain “so easy that trails in general are not needed.”<sup>44</sup> He maintained that “their presence would greatly detract from the charm of the hike.”<sup>45</sup> He felt trails should be confined to easy trails for the elderly near developed areas, such as the Horseshoe Lake

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<sup>39</sup> Adolph Murie, “Mission 66 plans,” 8.

<sup>40</sup> Adolph Murie, “Mission 66 plans,” 7.

<sup>41</sup> Adolph Murie, journal entry, 4 June 1962, Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>42</sup> Adolph Murie, “Mission 66 plans,” 7.

<sup>43</sup> Adolph Murie, loose journal page, n.d. approx 1959-63, Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>44</sup> Adolph Murie, “Mission 66 plans,” 6.

<sup>45</sup> Adolph Murie, “Mission 66 plans,” 6.

trail.<sup>46</sup> He saw a “disturbing trend” in the trail proposals of “a silver-platter planning tendency which we must guard against in McKinley in order to preserve its character.”<sup>47</sup>

In his critique Murie analyzed nearly every item in the Mission 66 planning prospectus and added a few topics of his own. He criticized the appearance of the “rather massive concrete bridges” that had replaced the smaller wooden ones in recent years. He thought a bridge’s esthetics included its effect on the landscape and it should be less noticeable than the creek or river it crossed.

Murie suggested two broad policy changes that would protect the park from future intrusions. He proposed an extension of the northern park boundary near Wonder Lake to protect the Kantishna area from further development (it would be another twenty-five years until his proposal became reality). Murie’s other major policy recommendation was for the park to establish an airplane policy. Far ahead of his time, he saw the need to establish the park’s quiet air space before planes were everywhere.<sup>48</sup> “Alaska is especially air-minded. Planes are perhaps used more there than elsewhere. But is not that a good reason for keeping planes out of the park, in order to have sanctuary for peace and quiet?”<sup>49</sup>

The wilderness values were so important to Murie that he felt compelled to fully express his ideals for how the park should be managed.

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<sup>46</sup> The Horseshoe Lake trail existed before the Mission 66 program, and still exists today in 2003.

<sup>47</sup> Adolph Murie, “Mission 66 plans,” 6.

<sup>48</sup> In 2002 the biggest complaint received from backcountry users is the disturbance from aircraft.

<sup>49</sup> Adolph Murie, “Mission 66 plans,” 13.

He knew he wasn't alone in his concern for McKinley Park's future and hoped that Jacobs would seek outside input on the Mission 66 plans:

All who have convictions about plans and policies should now reiterate them...I suggest that we seek assistance and guidance from the talent residing in conservationists and others outside the Service who are specially interested, in order that we get all possible help from those with a background of deep experience and who have an abiding philosophy pertaining to out-of-doors recreation.<sup>50</sup>

### Repercussions for Murie

Murie's critique was similar to his wildlife studies in that it ran against tradition. It questioned park administrators' tradition of putting park facades ahead of natural values. Murie knew his stand against the approaching tidal wave of "progress" risked a negative reaction. He hoped he was stating his opinions "with proper humility" and that his report wasn't "too captious."<sup>51</sup> But he was not surprised that Jacobs didn't appreciate his views on development in the park. Jacobs sent a dismissive one-page reply to Murie within days of receiving Murie's critique. In line with Wirth's guiding principle of Mission 66 development, Jacobs favored visitor facilities and implied Murie was clinging to an outdated personal vision of the park:

I think it quite reasonable for anyone of your many years of intimate knowledge of McKinley as purely a wilderness area

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<sup>50</sup> Adolph Murie, "Mission 66 plans," 1.

<sup>51</sup> Adolph Murie, "Mission 66 plans," 2.

to be somewhat alarmed as Mount McKinley National Park finally emerges across the threshold of a new era, that of a great national park set aside for the use and enjoyment of the people, which is soon to receive this intended use and enjoyment.<sup>52</sup>

Soon after sending his critique to Superintendent Jacobs, Murie received notice from the Region Four Office (the National Park Service was divided into five regions at that time; Region Four included Alaska) that his services at McKinley were no longer needed. Murie assumed it was Jacobs' retaliation for Murie's "hard hitting" critique.<sup>53</sup>

The official word from the Region Two office (which included Grand Teton) was that Murie could not adequately carry out his biologist job at Grand Teton National Park while working each summer in Alaska. Region Four concurred in part because Murie hadn't produced any written reports from his McKinley studies. The Director's office in Washington provided a temporary solution with the decision to reclassify Murie's position as a special assignment, with his primary task being the completion of his manuscripts on Mount McKinley's birds, mammals and wildflowers.<sup>54</sup> Murie's "special assignment" was based at Grand Teton

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<sup>52</sup> Duane D. Jacobs, Mount McKinley National Park to Adolph Murie, 15 November 1956, Adolph Murie Reference File, Denali National Park and Preserve Museum.

<sup>53</sup> Adolph Murie, to "Ed" (Assistant Regional Director, Western Region), n.d. probably March 1963, Adolph Murie Collection, temporary box 3, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>54</sup> "Position classification amendment," official Park Service notice of change in job status, 25 June 1957, Adolph Murie Collection, box 2, American Heritage Center, University of Wyoming, Laramie. His job was called a special assignment to

which allowed Adolph to remain at the family home. He was temporarily relieved of his regularly assigned biological investigations at Grand Teton so he could devote his time to his research data from McKinley. Both regional directors expected that Murie would become a full-time Grand Teton biologist once he readied his Alaska manuscripts for publication.

Murie never believed the official reasons for his special assignment and saw 1957 and 1958 as years of forced exile from Mount McKinley. He assumed it was punishment for his Mission 66 critique:

It was perhaps too forthright expression of opinion. But it was only opinion...The memo apparently was not liked, as I knew it wouldn't be. But I had felt that the values concerned were important enough to suffer some personal ill-will.<sup>55</sup>

It was not clear, from the record, if Duane Jacobs was indeed trying to keep Murie away from McKinley Park, but Murie thought the exchange of correspondence between Washington and Region Four "indicated that Region IV had reservations about my (eventual) return to McKinley."<sup>56</sup> One of the letters Murie referred to was from Region Four's Director Lawrence Merriam to the national director. Its tone was ambivalent:

The proposal to transfer Dr. Murie to Mount McKinley after he has completed his assignments requires some additional

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officially indicate he had a particular work assignment outside of the normal Park Service classifications.

<sup>55</sup> Adolph Murie, Moose, Wyoming, to Ben Thompson, 16 April 1958, Adolph Murie Collection, box 1, American Heritage Center, University Of Wyoming, Laramie.

<sup>56</sup> Adolph Murie, to Ben Thompson.

thought. While we recognize Dr. Murie's qualifications as a biologist and that his knowledge of Alaska would be most beneficial on such a transfer, there are several angles to the problem which should be carefully considered.<sup>57</sup>

Park Service Director Conrad Wirth made it clear he recognized Murie's value to Mount McKinley National Park and that he was going to override the Regional Office:

We have great confidence in and appreciation of Dr. Murie's abilities and experience at Mount McKinley and in Alaska generally. We believe that for the next several years his assignment to Mount McKinley would give the Service the greatest return from his knowledge. We therefore favor his transfer to the Alaskan assignment in fiscal year 1959.<sup>58</sup>

In further evidence of Washington's support of Murie's Alaska work Ben Thompson, the Park Service's Chief of Recreation and Resource Planning, and one of Murie's George Wright era colleagues, wrote Murie:

You have many friends both here and elsewhere in the Service...I certainly feel that the Service is fortunate to have your interest, talents, and background in McKinley wildlife

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<sup>57</sup> Regional Director, Region Four (Lawrence C. Merriam), to Director, 10 April 1957, Adolph Murie Collection, box 1, American Heritage Center, University Of Wyoming, Laramie.

<sup>58</sup> Director (Conrad L. Wirth), to Regional Director, Region Four. 4 June 1957, Adolph Murie Collection, box 1, American Heritage Center, University Of Wyoming, Laramie.

research as a basis for coping with the wildlife problems of the park.<sup>59</sup>

At the end of his special assignment Murie had to make a choice between working as a full-time biologist at Grand Teton or McKinley Park. The McKinley position would provide a three-month field season with nine months to prepare scientific and interpretive publications each year. But it required that he transfer to a Region Four park for his winter headquarters since his former Grand Teton offices were in Region Two. As much as Adolph and Louise didn't want to leave their home in the Tetons, Adolph's devotion to McKinley Park won out and they accepted the McKinley position. Since living at McKinley Park year-round would be too remote from family obligations, they reluctantly moved to Medford, Oregon in the fall of 1958.<sup>60</sup> The winter headquarters of Crater Lake National Park would be the Murie's winter home until they retired six years later.

#### **Murie returns to McKinley with roadwork underway**

Murie returned to McKinley on May 17, 1959 and a few days later moved to the cabin on Igloo Creek. He was glad to be back, but the circumstances were difficult. Louise had not returned with him so he was without her support and assistance. Jim Reid, the park's naturalist, pressured Murie to provide a copy of his bird manuscript for someone else to rewrite. Murie resisted because he wanted to maintain control of his

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<sup>59</sup> Ben H. Thompson, Washington, D.C., to Adolph Murie, 7 May 1958, Adolph Murie Collection, box 1, American Heritage Center, University Of Wyoming, Laramie.

<sup>60</sup> Adolph Murie, to Ben Thompson.



own research and writing. Superintendent Jacobs was unfriendly and refused to give Murie any help for the intense few day period of counting caribou during their spring migration.<sup>61</sup>

However, temporary rangers and naturalists voluntarily helped Murie with his caribou count on their days off. Murie was especially anxious to get a good count since he knew the counts done in his absence were inaccurate. While he had counted 8000 caribou in 1956, the park staff counted 2000 caribou in 1957 and again in 1958. Murie and his volunteer assistants counted 8500 in 1959. He was gratified to show the counts done in his absence were incomplete, providing evidence that his presence mattered.

That summer Murie had the “opportunity to discuss park ideals with many Alaskans and visitors from the states. All were receptive.”<sup>62</sup> He met “several fine young folks interested in wilderness” and kept a supply of his Mission 66 memo to hand out.<sup>63</sup>

Murie resumed his wildlife studies and returned to park headquarters as infrequently as possible. But on his resupply trips, he saw the progression of the Mission 66 roadwork. Reconstructing the first fourteen miles of the park road (to the Savage River) was to be accomplished by the end of that summer. He saw the charm of the old road obliterated under many feet of gravel as BPR standards directed widening the road to a standard 20-foot width and realigning sharp

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<sup>61</sup> Adolph Murie, McKinley, to Olaus Murie, 8 July 1959. Martin Murie Collection.

<sup>62</sup> Adolph Murie, to Regional Director, Region IV, 5 July 1959, Adolph Murie Collection, box 1, American Heritage Center, University of Wyoming, Laramie.

<sup>63</sup> Adolph Murie, to Olaus Murie, 4 July 1959. Martin Murie Collection.

curves.<sup>64</sup> Murie realized the old road needed some improvement, but he thought it important to maintain the road's simple character by making minimal changes:

The last time I saw the road it was simple, for funds had been limited during its construction. It has served its purpose and it was always adequate even though too narrow in a few places, especially at some of the blind corners...the road needs a little widening. But it should be kept a contour road, and a 30 mile an hour road, a park road.<sup>65</sup>

He thought the old road was in keeping with the wilderness character of the park in the way it followed the natural undulations of the terrain. "The feeling one gets is that the road passes through a wilderness that comes up to the road."<sup>66</sup> He thought the old road fostered appreciation of the park in ways a faster road would not:

The old road was built within a framework ideal for furtherance of park enjoyment. The road standards could not have been better developed by expert non-engineers. In saying this, I intend only the highest praise. But the blessing of a road with a tempo in harmony with the enjoyment of flowers, lichens, wandering tattlers and grizzlies has

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<sup>64</sup> Throughout this work, the "old" road refers to the original park road; the "new" road means the reconstructed park road.

<sup>65</sup> Adolph Murie, draft document (early draft, parts scratched out) entitled "Delicate Wilderness," n.d. probably 1956, Adolph Murie Collection, temporary box 14, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks, 2.

<sup>66</sup> Adolph Murie, "Mission 66 plans," 8.

apparently gone unrecognized, though its mood has charmed all visitors seeking the sublime.<sup>67</sup>

Murie believed cutting and filling to straighten the roadway completely changed the character of the road. Murie saw the new road as dominating the landscape and disrespectful to the park's wild character.

### **Murie's transition to wilderness conscience**

The road issue focused Murie's attention on protecting McKinley's wilderness esthetics. Murie had long been a wilderness advocate, but seeing the Mission 66 plans threaten McKinley gave Murie a personal cause. His opposition to the roadwork and other Mission 66 projects was very much the minority view in Alaska and at the park. Most Alaskans still agreed that opening up the country was desirable and commercial interests wanted McKinley Park to have a more central role in Alaska's tourism industry. Murie had a few local allies who shared his sentiments that the roadwork had gone too far. They hoped the road engineers would come to their senses and follow more minimal construction standards beyond Savage River the next year."<sup>68</sup> His allies included Ginny Wood and Celia Hunter, Camp Denali's owners, along with some park employees.

Park maintenance man Charlie Ott was Murie's personal friend and a kindred spirit. They compared notes, shared ethics and ideals, and hiked and photographed together. After the road crew blasted rock from Cathedral Mountain to use on the approach to a bridge over Igloo Creek

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<sup>67</sup> Adolph Murie, "Roadbuilding in Mount McKinley National Park," *National Parks Magazine* (July 1965): 4-7.

<sup>68</sup> Adolph Murie, "Roadbuilding," 5.

Murie and Ott named the marred area “Desecration Canyon.”<sup>69</sup> They lamented the lack of consideration for natural features, “Old cliffs were ruthlessly blasted in three places. A lasting blemish was inflicted on this canyon.”<sup>70</sup> Murie called it “vandalism to the nth degree.”<sup>71</sup>

Since Charlie Ott was a year-round park employee he kept Murie informed of the ongoing politics and projects at the park when Murie was absent. After Charlie wrote in his 1959 Christmas card to the Muries that the Park Service “is killing Denali,” Adolph felt a new sense of urgency and he turned to his influential brother for help:

I wonder if something cannot be done. And is not now the time? Could you not write the Director that you are greatly disturbed about what seems to be happening in McKinley in this road building? That the standards are far out of line, that the road should never be a speed highway – it should remain a park road. I do believe that drastic action should be taken.<sup>72</sup>

### **Growth in opposition, led by Murie**

Adolph recognized Olaus’s position as the director of the Wilderness Society as a valuable asset. It was not the first time Adolph enlisted his brother’s voice in addressing his own concerns. For a decade or more,

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<sup>69</sup> Ed Zahniser, “Sixteenth Summer, A Journal.” 1961. An unpublished personal account of the summer of 1961 in Alaska (the Brooks Range and Mt. McKinley National Park) as a family friend of the Muries. Roger Kaye personal collection. Park road bridges were replaced one by one beginning in 1951 in a capital project separate from Mission 66.

<sup>70</sup> Adolph Murie, “Mission 66 plans,” 11.

<sup>71</sup> Adolph Murie, journal entry, 9 September 1956.

<sup>72</sup> Adolph Murie, to Olaus Murie, 18 December 1959, Martin Murie Collection.

Olaus had written letters and articles at his brother's request on National Park Service issues.<sup>73</sup> As the director of the Wilderness Society Olaus was extremely busy with his own work - marshalling support for passage of the Wilderness Act and for establishment of the Arctic National Wildlife Refuge, but he always found time to work with Adolph on his concerns. Olaus had already written two earlier letters to Conrad Wirth criticizing Mission 66's overall plans and misleading publicity. Copies of his letters were widely circulated among conservation groups and primed the growing protest nationally over Mission 66 projects.<sup>74</sup>

In 1960 the road reconstruction reached Sanctuary River (mile 23). The massive cuts and fills along the side of Mount Margaret (mile 15 to 21) were more extreme than the previous summer's work. It was clear neither the road engineers nor the park superintendent intended to moderate the road plans. Superintendent Jacobs had ignored Murie's suggestion to seek counsel outside of the NPS on the Mission 66 proposals, so Murie started to use his own connections to enlist a contingent of outside voices. The roadwork would continue for several more years as the road crews reconstructed the road a section at a time while Murie and his allies gathered forces.

The new road's incompatibility with McKinley's wilderness esthetics became Murie's topic of conversation with everyone. He was not shy about pointing out the merits of keeping the park road and park facilities on the primitive end of the spectrum. As his wife put it "he gave everyone he met

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<sup>73</sup> Louise Murie MacLeod interview.

<sup>74</sup> Sellars, 189.

the lecture.”<sup>75</sup> His “lecture” was far from a pedantic ordeal. Since he was engaging and humble, people wanted to hear what he had to say.<sup>76</sup> As Murie traveled the park road during his studies, he often had conversations with park visitors at wildlife-viewing stops. In addition there was a constant stream of visitors to the Igloo Cabin where the Muries lived the summers of 1960 through 1964. Some visitors sought out Dr. Murie as the famous wolf biologist, they included professional colleagues and summer park employees. The park’s tour bus drivers welcomed opportunities to chat with Murie. His prestige as the wolf biologist might have gotten their initial attention, but his direct and genuine style instilled respect. Murie enjoyed one-on-one conversations and he hoped some of them would result in letters protesting the park’s development plans. He was adept and articulate at tying his practical concerns for McKinley to wilderness esthetics and values.

Though he was known to avoid the limelight, Murie felt his responsibility as an advocate transcended all else. Wally Cole remembers Murie’s comments that he was willing to be the front person, to be unpopular since someone had to be.<sup>77</sup> The connection Murie felt to McKinley’s wilderness gave him the focus and courage to speak out. He spoke eloquently of the values of wilderness that were important to him personally. With a manner disarming in its directness, Murie’s deep caring touched people. To those who knew him, he was a gentle, modest,

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<sup>75</sup> Louise Murie MacLeod interview.

<sup>76</sup> Jan Murie.

<sup>77</sup> Wally Cole, interview by author, Denali Park, Alaska, 3 March 2003.

unassuming man who moved others with his idealism, indignation and facts.<sup>78</sup>

Many times during the Mission 66 years, Murie decried the lack of consideration for McKinley's wilderness:

The manner in which some roads are built, especially in McKinley Park, make one think of a blacksmith repairing wrist watches with his horseshoeing implements. The wilderness should be thought of as something as delicate as the smallest watch, and dealt with accordingly.<sup>79</sup>

Some in Murie's audience became wilderness advocates. They supported Murie's appeal to stop road development and to preserve McKinley's core wilderness values. Critics of the development took to calling the "improved" road a speedway and often repeated Charlie Ott's statement "you don't go tearing to beat hell through a museum."<sup>80</sup> Murie's sentiments remained clear,

We are dealing here with precious wilderness qualities, and the delicacy and purity of the mood in this park requires a delicate touch. If this fact were recognized, the Park Service

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<sup>78</sup> Wally Cole. Steve Buskirk, telephone interview by the author, 18 February 2003.

<sup>79</sup> Adolph Murie, journal entry, 13 May 1962, Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>80</sup> Tom Walker, *Denali Journal* (Harrisburg: Stackpole Books, 1992), 156.

would dispense with the recruiting of an army of bulldozers.<sup>81</sup>

Beyond the road controversy, Murie continued to advocate for minimalist intrusions into the natural setting. His strong esthetic sense shunned unnecessary human-made structures in the Park. And to Murie almost everything was unnecessary. For example, he criticized the park radio antennas; he found them unsightly and unneeded. Their value for communication did not impress Murie: “It is the idea of the White Knight—be prepared for every imaginable circumstance.”<sup>82</sup>

Murie decried the pressures from commercial interests that favored park development projects. He protested that national parks “were not set aside to make travel agencies concessionaires” nor to bolster the economy of Fairbanks and Anchorage.<sup>83</sup> He realized that parks do contribute a great deal to Alaska’s economy, “but let us not try to use them so as to squeeze the last nickel from them as though...they were a bag of change open at both ends.”<sup>84</sup>

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<sup>81</sup> Adolph Murie, “Roadbuilding,” 9.

<sup>82</sup> Adolph Murie, journal entry, 3 June 1962, Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>83</sup> Adolph Murie, journal entry, 31 August 1965, Adolph Murie Collection, temporary box 6, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>84</sup> Adolph Murie, journal entry, 1 September 1965, Adolph Murie Collection, temporary box 6, Alaska And Polar Regions Collections, Elmer E. Rasmuson Library, University Of Alaska Fairbanks.



### The move toward preservation

The Mission 66 issue at McKinley reflected the changing times. Mission 66 started in the pro-development 1950s, but with the 1960s came a time of questioning values, counter-culture influences and a stronger environmentalism. The Wilderness Act hearings and concomitant publicity helped more Americans recognize and articulate wilderness values. When Murie spoke of the wilderness spirit of McKinley being marred by excessive road building, the growing conservation-minded segment of the public understood the concept.

By 1963 the National Parks and Conservation Association's magazine, *National Parks*, became the forum for a series of articles on the projects at McKinley. Most of the sentiments expressed in the *National Parks* series reflected Adolph Murie's 1956 critique of McKinley's Mission 66 plans. The evidence indicates he was the central individual figure in drawing attention to the Mission 66 development plans at McKinley.

Olaus Murie's article in April 1963 described his experiences in McKinley Park in poetic terms where "nature in all its glory ruled" while "the prevailing enthusiasm for what the bulldozer can do" threatened to turn McKinley and other national parks into amusement parks.<sup>85</sup> He quoted Aldo Leopold: "Recreational development is a job not of building roads into the lovely country, but of building receptivity into the still unlovely human mind."<sup>86</sup> Historian William Brown credited Olaus Murie's article with getting the NPS chief of design and construction Clark Stratton to revise road plans in 1963. For the first time Adolph Murie's concept of

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<sup>85</sup> Olaus J. Murie, "Mount McKinley: Wilderness Park of the North," *National Parks Magazine* (April 1963): 5.

<sup>86</sup> Aldo Leopold in O. Murie "Mount McKinley: Wilderness Park of the North," 6.

“leaving the road lying on the ground” became part of Park Service standards. Stratton’s memo stated that whenever possible, the reconstructed road would follow the original alignment.<sup>87</sup>

In a May 1963 article authors Paul Tilden and Nancy Machler stated that the Park Service statisticians “were a little on the optimistic side in estimating visitation” since the Denali Highway opened in 1957. For 1962 the NPS projected 32,300 visits but the actual number was 16,600.<sup>88</sup> Tilden and Machler also emphasized that the road no longer encouraged visitors to experience and enjoy their park, but had become “the type of park road which invites the user to get in fast and get out fast.”<sup>89</sup>

The editors of *National Parks Magazine* officially came out against the road reconstruction and some of the visitor facilities at McKinley in their September 1963 issue - pleading to be reassured that “the Park Service is not selling its soul to the public demand for easy comfort and amusement.”<sup>90</sup>

In addition to his brother, Adolph called upon other Wilderness Society voices for assistance in his fight to keep McKinley Park wild. In 1960 Sigurd Olson wrote Adolph that he agreed with most of his Mission 66 critique.<sup>91</sup> And in 1964, in his capacity as consultant to the Secretary of the Interior, Olson recommended stopping improvements of the McKinley

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<sup>87</sup> Brown, 199.

<sup>88</sup> Paul M. Tilden, Nancy L. Machler, “The Development of Mount McKinley National Park,” *National Parks Magazine* (May 1963): 10-15.

<sup>89</sup> Tilden & Machler, 13.

<sup>90</sup> “Some Views Concerning the Development of Mount McKinley National Park,” *National Parks Magazine* (September 1963): 18.

<sup>91</sup> Sigurd Olsen, to Adolph Murie, 6 September 1960, Adolph Murie Collection, temporary box 12, Alaska And Polar Regions Collections, Elmer E. Rasmuson Library, University Of Alaska Fairbanks.

Park road in order to leave the rest of it a narrow and winding, aesthetically enjoyable road. The new director of the Park Service, George Hartzog, supported implementing “as many of Sig’s recommendations as we possibly can.”<sup>92</sup>

Major road reconstruction had already reached the Teklanika River, thirty miles into the park. But after Olson’s recommendations to the director there was no additional roadwork beyond the first thirteen miles of the road to the Savage River.<sup>93</sup> There was no Park Service document that announced the end of road upgrades, it was more incremental down-sizing of the plans as criticisms mounted.<sup>94</sup>

Many of the projects first listed in the McKinley Park’s Mission 66 prospectus were complete by the mid-60s – Eielson Visitor Center (mile 65), Riley Creek Campground (near the park entrance), short hiking trails in the hotel area, interpretive signs along the road.<sup>95</sup> However many projects had been dropped including the Savage area hotel and the backcountry trails (Table 1).

The park road controversy marked a major transition in the park’s history. Murie helped clarified the park’s value as a recognized and valued wilderness area. Preserving the wilderness character of the park road became synonymous with preserving the wilderness character of the whole park. Murie brought the discussion of McKinley’s wilderness values out

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<sup>92</sup> Sigurd F. Olson, report to the Secretary of the Interior, 19 February 1964, Adolph Murie Reference File, Denali National Park and Preserve Museum. Sigurd F. Olson, to George Hartzog, Director National Park Service, 24 January 1966, Adolph Murie Reference File, Denali National Park and Preserve Museum.

<sup>93</sup> The first thirteen miles were paved in 1967.

<sup>94</sup> Frank Norris, NPS historian, personal communication 28 January 2004.

<sup>95</sup> Most of the roadside interpretive signs were removed in the late 1970s.

Table 1. Mission 66 proposals for visitor facility “upgrades” at Mt. McKinley National Park, Alaska (1956-1966) and Adolph Murie’s support or opposition to them.  
The 1966 and current status of each.

<u>Mission 66 proposals</u>	<u>Murie's View</u>	<u>Results</u>	<u>1966 status</u>	<u>2003 status</u>
Park Road Improvements	Opposed	Mixed <sup>1</sup>	Rebuilt to mile 31, paved to mile 15	Continuous incremental improvements <sup>2</sup>
Savage River Hotel	Opposed	Cancelled	No hotel	No hotel
Polychrome interpretive shelter	Opposed	Cancelled	Left as was, with pit toilets out of sight	Large rest stop/shelter
8 mile Savage River Trail	Opposed	Cancelled	No trail	2 mile improved trail w/bridge
20 mile Double Mountain Trail	Opposed	Cancelled	No trail	Same
10 mile Toklat Glacier Trail	Opposed	Cancelled	No trail	Same
Sheldon Cabin Trail	Opposed	Cancelled	No trail	Same
Sheldon Cabin reconstruction	Opposed	Cancelled	Left to disintegrate	Mostly disintegrated
24 mile McGonnagal Pass Trail	Opposed	Cancelled	McKinley Bar trail left as unimproved social trail	2 mile improved trail
Riley Creek Campground	Opposed	Completed	Riley Creek Campground at Mile 0.5	Expanded in 2002
Interpretive signs	Opposed	Completed	Ten large signs along road at intervals	One remains at Mile 7
Savage Campground	Opposed	Completed	35 campsites	Same
Hotel area short trails	Supported	Completed	Short trails starting at hotel added	Same trails still there
Teklanika Campground	Supported	Completed	50 campsites	Same
Wonder Lake Campground	Relocate		Left as was, atop knoll	Relocated below knoll in 1980s
<b>Proposed by Murie:</b>				
Hotel area campground	Supported	Completed	Morino campground; outhouses only.	Removed in 2002

Note: This table includes only visitor facilities. It does not include utility and employee-housing projects since Murie had no comment on those.

<sup>1</sup>Original road improvements were not completed due to pressure to stop.

<sup>2</sup>Beyond the Teklanika River (mile 31) the road noticeably changes character as it becomes a more narrow contour road. However, incremental maintenance and realignment projects have left only a few remnants of the old road.

into the open and articulated a new vision for the park that continues in tangible ways today - the topic of chapter four.

### **Murie's final park years**

Murie continued his official Park Service work throughout the Mission 66 period. In addition to monitoring the caribou, sheep and wolf populations he focused on his study of grizzly bears. He spent many hours observing them in an effort to understand their ecology and behavior.<sup>96</sup> During the winters in Oregon he continued writing and finished three books.

His anthology of twenty-two nature essays, *A Naturalist in Alaska*, was published in 1961 to much popular acclaim. Over the next two years he published the long awaited park reference guides: *Mammals of Mount McKinley* in 1962 and *Birds of Mount McKinley* in 1963. Along with his *Wolves of Mount McKinley*, these books were the only ones available on the natural history of the park for many years. In 1963 Murie was awarded the John Burroughs Medal for *A Naturalist in Alaska*. This award had annually honored an author of a distinguished book of natural history since 1926.<sup>97</sup>

Murie officially retired in January 1965, but he and Louise continued to travel to McKinley for six more summers. Murie finally gained respect and official acknowledgement from his agency in

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<sup>96</sup> Adolph Murie, *The Grizzlies of Mount McKinley*, xi.

<sup>97</sup> Adolph's son, Jan, speculated that what "tickled" Murie most about receiving the Burroughs award was the fact that he joined the company of his childhood hero, Ernest Thompson Seton, who won the second Burroughs award in 1927. Jan Murie interview.

retirement. Though Murie had received support from his friends in the national office when his work was controversial, he was surprised to be awarded the Department of the Interior's highest honor, the Distinguished Service Award. In August 1965 Stanley Cain, assistant secretary of the Interior gave the award to Murie at a ceremony at Camp Denali. The citation praised Murie's "classic ecological studies," pursuit of solutions to "difficult wildlife situations," and his "lifelong dedication to conservation principles."<sup>98</sup>

Murie continued his defense of wilderness. He was invited to join NPS master plan studies for McKinley Park in 1968 as a consultant.<sup>99</sup> Murie's widow, Louise Murie MacLeod, recalls that in his later years Adolph "couldn't see anything but Alaska - it was really an obsession with him. I guess he felt as though he had to protect it himself."<sup>100</sup>

He was slowing down by the late 1960s and spent more time observing wildlife through spotting scopes from the park road. Adolph had a friendly relationship with those he saw along the road who exchanged wildlife sightings with him and continued the conversation on park ethics. Murie's reputation as pioneering scientist and protector of park values made him a revered elder to many. Wally Cole, park hotel manager in the late 1960s, fondly recalls seeing Murie above the East Fork River gazing through his spotting spot at bears. He cut a dashing figure: a

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<sup>98</sup> U.S. Department of the Interior "Citation for Distinguished Service," Adolph Murie Collection, temporary box 3, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>99</sup> Robert S. Luntney (Chief, Office of Resource Planning, National Park Service), to Adolph Murie, 17 June 1968, BBC-DENA.

<sup>100</sup> Louise Murie MacLeod interview.

slight man with a mane of white hair in his trademark wool plaid shirt with bandana tied at the neck.

In 1970 the Muries left McKinley Park for the last time. Ade needed help walking across the platform to get on the train. Doctors speculated the combination of Rocky Mountain spotted fever and malaria had taken their toll.<sup>101</sup> Even in ill health, he continued his activism from the Murie Ranch in Moose, Wyoming until his sudden death from a seizure in 1974.

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<sup>101</sup> He contracted Rocky Mountain spotted fever while working in Dinosaur National Monument. Louise Murie MacLeod interview. Bill Nancarrow interview.

## CHAPTER FOUR: MURIE'S LEGACY AT DENALI

Ecological wildlife management and wilderness appreciation at Denali National Park would have developed without Adolph Murie, but not with the same degree of integrity and sense of direction. As a scientist he gave the park an ecological approach to wildlife, as a defender of wilderness he gave the park a revised philosophical direction. As an author he has enriched countless lives with newfound appreciation for both wildlife and wild places.

But Murie's presence as a voice for wilderness is eroding. It is difficult to generalize about the extent to which his influence lives on at Denali. Just as in his own time, some management policies and managers still defer to his ideals, while others follow a trend away from them.

### **Wolf study and boundary extensions**

At Denali today most people know of Adolph Murie for his pioneering wolf study. His study ensured the continuation of a healthy wolf population and led to new perspectives and policies in wildlife management at Denali. Valuing and protecting all animal species became accepted policy at Denali because of Murie's work. In addition, his study led to changes in the public image of wolves. Today both the physical presence of wolves at Denali and the attitudes of fascination and respect toward them are part of Murie's legacy.

Murie's own understanding of the ecology of wolves led him to recommend extending the park's boundaries to better protect the home range of the park's large mammals. He first advocated northern boundary extensions during the mid-1950s; he kept the discussion alive by including it in several formal proposals and in park discussions. Murie's influence on



Sigurd Olson and then NPS Director Hartzog resulted in The Wonder Lake – Kantishna Boundary Study in 1965.<sup>1</sup> Murie thought the park needed more space.

In our thinking of McKinley let us not have puny thoughts. Let us realize that the park is very narrow and think on a greater scale. Let us not have those of the future decry our smallness of concept and lack of foresight.<sup>2</sup>

Park supporters took the boundary issue seriously and it became a bill before Congress in 1971 (H.R. 1128).<sup>3</sup> However it was 1980 before the Alaska National Interest Lands Conservation Act (ANILCA) incorporated and expanded Murie’s recommendations. ANILCA tripled the park in size and gave it a new name – Denali National Park and Preserve. The extended northern boundary is credited today for providing greater protection to park wildlife, especially caribou and wolves.

#### **Limited roadside development and park road character**

What started as an attraction to an unspoiled Mount McKinley National Park developed into Adolph Murie’s wilderness ethic. Murie’s appreciation of the park’s wilderness character inspired him to work at limiting development plans in the 1960s Mission 66 era. If all the plans in

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<sup>1</sup> C. Gordon Fredine (Acting Assistant Director, Cooperative Activities, National Park Service), to Regional Director, Western Region, 18 June 1964, Bill Brown Collection, Denali National Park and Preserve Museum.

<sup>2</sup> Adolph Murie, loose-leaf page titled “conservation,” 16 September 1964, Adolph Murie Collection, temporary box 9, Alaska and Polar Regions Collections, Elmer E. Rasmuson Library, University of Alaska Fairbanks.

<sup>3</sup> Adolph Murie, Moose, Wyoming, to Congressman John P. Saylor, 20 July 1971. Adolph Murie Reference File, Denali National Park and Preserve Museum.

Mission 66 had become reality, they would have radically changed the character of the park. Perhaps Denali would be more like the Yellowstone Michael Frome describes, “where visitors drive the loop from point A to point B, stopping at another tourist site and convenient concession facility, with scant understanding of ecological cost and consequence.”<sup>4</sup> Murie’s activism ensured that the single park road did not become a highway. He promoted keeping visible infrastructure at a minimum. Today, human development is only at a few scattered sites along the road corridor. However, these developments are much bigger and more noticeable than in Murie’s time.

The physical presence of the road itself is less dominating than it would have been if the road improvements in Murie’s era had continued. Mission 66 plans proposed widening and realigning the whole road to federal highway standards. The entire 91-mile park road would be similar to the wide built-up above grade road to the Teklanika River. Instead, it is a less intrusive, winding road beyond Teklanika. Murie’s efforts kept Denali National Park a place where the Park Service is able to describe the park experience this way:

an overwhelming feeling of wilderness is still available for all types of users. Visitors...may travel the park road and

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<sup>4</sup> Michael Frome, *Regreening the National Parks* (Tucson: University of Arizona, 1992), 187.

pass through a rugged wilderness area that lacks the visual intrusion of extensive facilities...<sup>5</sup>

This is not to say that the road remains the way Murie last saw it. Most of the road today is a compromise between the massive realigning of the 1960s and what Murie called the “old road.” There are still a few places where the road is a “contour road” following the undulations of the terrain, where it looks like it fits the landscape. But with each passing year the road loses more of its primitive character as the park management approves incremental changes.

Though some vocal and persistent park staff members defend Murie’s concept of road character whenever the subject of road improvements comes up, there is constant pressure to further straighten and widen the road. Denali’s road maintenance crew continually presses for road upgrades in the name of safety, even though studies have shown that removing curves may actually make a road more dangerous since drivers’ speeds increase.<sup>6</sup> In addition, park road bus drivers are specifically trained to adapt to the existing road and most feel the road is safe as is – as long as one drives with respect for existing conditions. However, the fact that there are discussions of “road character” at Denali at all shows Murie’s legacy left in considering park esthetics.

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<sup>5</sup> National Park Service, *Denali National Park Resources Draft Backcountry Management Plan*, General Management Plan Amendment, Environmental Impact Statement (Denali National Park: National Park Service, 2003).

<sup>6</sup>Paul Daniel Marriott *Saving Historic Roads* (New York City: John Wiley & Sons, Inc., 1998), 23.

### Controlled park access and the bus system

Wilderness values became central to discussions about the park's future and gave park management a new perspective by the end of the Mission 66 era in the late 1960s. Today's major components of land (and visitor) management at Denali, the park bus system and the backcountry use system, are traceable to Murie's inspirational legacy. Each of these systems were landmark forms of management in national parks when implemented in the 1970s and remain integral to the protection of resources and to visitors' experience at Denali today. The bus system limits traffic volume on the park road, and the backcountry use system controls hikers' interactions with the park away from the road.

A Park Service planning team's description of the McKinley Park road in 1968 demonstrated the change in management perspective from a decade earlier. The 1968 description could have been written by Adolph Murie:

This is a slow scenic park road, and the nature of the park and its resources is that it is the only acceptable kind of road...upgrading this road to BPR (sic) standards would be a grave mistake, resulting in more speed, less appreciation, and adverse impact on unique wildlife.<sup>7</sup>

In 1968 the park faced another large escalation in visitation with the coming opening of the Anchorage-Fairbanks highway (the George Parks Highway). This time the Park Service reasoned they could maintain

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<sup>7</sup> "MOMC Master Plan Team 1968 notes" (Mount McKinley National Park internal document), 11. Bill Brown Collection, Denali National Park and Preserve Museum.

the park's wilderness character only by keeping the road in its existing state. But maintaining the road's existing state would create another set of problems: traffic congestion and displacement of wildlife from the road corridor. To address these problems the park restricted private vehicles and introduced a public bus system in 1972. The buses were called shuttle buses to differentiate them from the tour buses. The goals of the bus system were to minimize the impact on wildlife, increase safety along the road and enhance visitors' experiences with better opportunities to see Denali's wildlife. For the first time, park management based a major policy decision on protection of the park's resources, wildlife and wilderness, rather than providing unregulated visitor access.

Providing access to the park interior via shuttle and tour buses is one of the most important aspects of protecting wildlife and scenic resources in today's park.<sup>8</sup> Using buses instead of cars reduces the traffic on the road and lowers the road's impact on animal movements and behavior, and increases visitors' chances of seeing wolves, grizzlies, and other animals in their natural environment. The buses enhance animal watching by serving as blinds that allow close-up observation of animals. Nowhere else can such concentrations of these wildlife species be observed in an accessible natural setting.

Over thirty years later, the primary purposes of the bus system are much the same: to protect the wildlife of the park and to provide a high-quality, wilderness-oriented visitor experience with excellent opportunities

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<sup>8</sup> S. L. Burson III et al. "The Effect of Vehicle Traffic on Wildlife in Denali National Park," *Arctic* 53, no. 2 (2002).

to view wildlife in an undisturbed setting.<sup>9</sup> Since most visitors report high satisfaction with their park bus trip, the park seems to succeed in providing a high quality experience.<sup>10</sup> However if the experience were gauged by Adolph Murie's criteria, it would not measure up to his standards. He would approve of the protection afforded wildlife by the bus system, but he would be dismayed at the controlled experience it provides. He believed that tourists should be left on their own to do their own looking and exploring, not instructed in what to see or how to experience it. While Murie wouldn't consider a park bus ride a wilderness experience, he would see its utility as a way of starting one's own individual wilderness experience. Shuttle bus passengers have the freedom to get off their bus at nearly any point along the road, later to board a different bus. When visitors use the shuttle bus system this way, as transportation to their selected area to explore, they have the opportunity for self-discovery that Murie found so important.

### **Backcountry management**

The opening of the Parks Highway between Anchorage and Fairbanks in 1972 affected the park beyond the road corridor. As visitation increased dramatically and the new bus system made it easier for backpackers to hike in the park, the park's backcountry suddenly

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<sup>9</sup> *Entrance Area and Road Corridor Development Concept Plan/EIS* (Denali National Park and Preserve: National Park Service, 1997).

<sup>10</sup> Craig A. Miller and R. Gerald Wright, *Visitor Satisfaction with Transportation Services and Wilderness Viewing Opportunities in Denali National Park and Preserve*, Idaho Cooperative Fish and Wildlife Research Unit Technical Report (Moscow: University of Idaho, 1998).

received attention. Chief Ranger Gary Brown hired Steve Buskirk as McKinley Park's first backcountry manager in 1973.

Buskirk immediately went to work on a backcountry management plan (BCMP)- written to preserve the wild untrammeled backcountry. He focused on protecting the backcountry from hikers' impacts and on preserving the quality of backcountry experiences for the hikers. At a time when most other national parks were planning for ways to allow increased backcountry use the Denali plan specified use limits. In making wilderness values the priority, Denali's 1976 plan set a new standard for backcountry management in the national park system.<sup>11</sup>

Buskirk later attributed much of his inspiration in working on the 1976 backcountry management plan to Murie. Murie's philosophy and personality had impressed Buskirk when he knew him in the late 1960s. Steve was a park tour bus driver at the time and Murie's philosophy on wilderness made sense to him; he felt a strong personal connection to Murie's wilderness ideals. When he had a chance to institutionalize backcountry protection at McKinley Steve Buskirk felt responsible for protecting the park consistent with Murie's views.

McKinley Park's first backcountry management plan went into effect in 1976 and it still guides the backcountry experience today, both as policy and in philosophy.<sup>12</sup> Buskirk wrote the plan to protect those unique values that set McKinley apart from other national park units. They were

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<sup>11</sup> Buskirk. Joe Van Horn, interview by author, Denali Park, Alaska, 11 February 2003.

<sup>12</sup> The 1986 *Denali National Park and Preserve General Management Plan* (National Park Service, 1986) continued the backcountry management direction from the 1976 plan, calling for an extension of the quota and backcountry unit system to the 1980 ANILCA additions as necessary.

values that Murie attached to wilderness experiences, such as solitude and self-discovery in an environment free of human intrusions. “Dispersed use” was the guiding philosophy in the 1976 BCMP. “Dispersed use” is a philosophy that spreads use over a wide area instead of centralizing it in more concentrated areas. This allows opportunities for experiencing the primitive character of Denali’s backcountry, while preserving freedom of choice and self-reliance which were other basic factors in the 1976 BCMP.<sup>13</sup> Self-determination and route-finding are still a significant part of the backcountry experience at Denali. These conditions contrast with most wilderness backcountry areas in the lower 48 states where maintained trails, designated campsites, footbridges, and fire rings are standard.<sup>14</sup> Denali’s backcountry is largely trailless and evidence of human use is minimal to nonexistent. Murie had been the first to object to Mission 66 backcountry trail proposals, leading other conservationists and subsequent park policies to reject trail and hut systems.<sup>15</sup>

To maintain dispersed use, backcountry permits are required for overnight stays in the 43 designated backcountry units of the old park. To keep resource impacts and backcountry encounters between backpackers low, there are quotas in each backcountry unit.<sup>16</sup> Eighty-seven percent of respondents to a 2000 backpacker survey at Denali opposed allowing unlimited use in the backcountry while 94% agreed with the existing objective that backpackers should be able to camp out of sight or sound of

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<sup>13</sup> 2003 Backcountry Plan, 178.

<sup>14</sup> 2003 Backcountry Plan, 7.

<sup>15</sup> Adolph Murie, “Mission 66 plans,” 6. 2003 Backcountry Plan, 177.

<sup>16</sup> 2003 Backcountry Plan, 208.



all other parties.<sup>17</sup> Denali's backpackers approve of restrictive park rules in order to maintain the high quality of experience.

One of the backcountry desk's restrictive policies is to never suggest where hikers or backpackers should go.<sup>18</sup> Though this policy confounds many it is part of the dispersed use philosophy that promotes self-discovery and leave-no-trace backcountry practices (these practices include camping and traveling on durable surfaces, not disturbing wildlife or vegetation, packing out all garbage, and properly disposing of human waste).<sup>19</sup>

### **Wilderness management**

Wilderness management became a bigger concern throughout the Park Service in the early 1970s with new environmental legislation in effect - most notably the 1964 Wilderness Act. Though McKinley did not have "designated wilderness" until 1980 under ANILCA, Congress required all National Park Service wilderness lands to be administered in keeping with the Wilderness Act while those lands were considered for official inclusion in the National Wilderness Preservation System. The lands were to be managed in such a manner "as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection

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<sup>17</sup> Jane E. Swanson, Mark E. Vande Kamp, Darryl R. Johnson, et. al, "A Survey of Overnight Backcountry Visitors to Denali National Park and Preserve," 2002 Technical report NPS/CCSOUW/NRTR-2002-04 NPS D-318, (National Park Service, 2002).

<sup>18</sup> The backcountry desk, in the park's visitor center, is the location for backcountry permits (required for all overnight hikes). The backcountry staff will not tell anyone where to hike, but they do supply reference notebooks with backcountry unit descriptions for ideas.

<sup>19</sup> 2003 Backcountry Plan, 208.

of these areas, the preservation of their wilderness character...”<sup>20</sup> Despite that strong direction of the Wilderness Act, the National Park Service didn’t give agency guidance for implementing wilderness management and left it up to the individual parks.<sup>21</sup> It was Adolph Murie’s compelling presence and lasting influence at Denali that made it one of the first parks with innovative wilderness management. Joe Van Horn, Denali National Park’s current Wilderness Coordinator, thinks Adolph Murie inspired those who came after him with the background and courage to be idealistic, to stand up for principled management. He believes “Murie softened the place up for those who followed.”<sup>22</sup>

Joe Van Horn says that Adolph Murie still provides him the inspiration to rethink backcountry dilemmas and to ask questions about management decisions “Does it have to be done that way here? Is it really a need? Is it really a solution? Is it consistent with core values?”<sup>23</sup> He tells a specific story from the 1980s, when confronted with increasing incidents of bears obtaining food from backcountry users: Van Horn and John Dalle-Molle, Denali’s biologist, looked for a solution to the bear problem that wouldn’t compromise the core values of dispersed use inherent in Denali’s backcountry management plan. They knew the standard practice in other national parks of having designated campsites with bear-proof food lockers would not be in keeping with Murie’s, now Denali’s, backcountry ideals. Van Horn and Dalle-Malle instead developed bear-resistant food

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<sup>20</sup> 2003 Backcountry Plan, 5.

<sup>21</sup> Congress specifically instructed the NPS to administer all its wilderness lands in keeping with the Wilderness Act while they were considered for official inclusion in the National Wilderness Preservation System.

<sup>22</sup> Van Horn. He is the source for the paragraph.

<sup>23</sup> Van Horn.

containers (BFRCs) that could be attached to one's backpack. The BFRCs are consistent with the philosophy of self-reliance and dispersed use. Van Horn said he literally asked himself, "what would Adolph Murie do?"<sup>24</sup>

### **Proposed new backcountry management plan**

At the turn of the century, the 1976 BCMP still adequately addressed backpacking, but did not cover newer issues of: visitor experience, resource protection, and user conflicts.<sup>25</sup> The 2003 "Draft Backcountry Management Plan" (DBCMP) was an attempt to address the increased uses and conflicts in Denali's backcountry, particularly motorized recreation.<sup>26</sup> The 2003 DBCMP serves as a gauge to some of the trends in Denali's management since Murie's time. When Denali's first BCMP came out in 1976 just two years after Adolph Murie's death it was a testament to his ideals. The writers of the park's first backcountry management plan used Murie's wilderness ethic as their guide - it was visionary.

In contrast, the 2003 DBCMP is reactionary: rather than being driven by guiding ideals, it is driven by the impending crisis over motorized uses - dramatically increasing aircraft and snowmobile impacts. The plan's stated goal is providing "future generations with a variety of opportunities to experience the park backcountry while protecting park wildlife and other natural resources, wilderness values and subsistence uses."<sup>27</sup> Its similarity to the National Park Service Organic Act's in its dual desire to protect resources while providing for visitor use, leaves it a

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<sup>24</sup> Van Horn.

<sup>25</sup> 2003 Backcountry Plan, 1.

<sup>26</sup> 2003 Backcountry Plan, vii.

<sup>27</sup> 2003 Backcountry Plan, 1.

document without a clear mission. The plan declares the intent to prioritize protection of wilderness values by stating: “The National Park Service would manage all backcountry areas of the national park to protect wilderness character.” However, it does not support its own claim. The Park Service’s “preferred alternative” would result in higher impacts to natural resources than current conditions.<sup>28</sup> The “preferred alternative” would expand recreational opportunities such as new backcountry trails, snowmobiling corridors and less restrictive aircraft limits in many areas of the park and preserve while generating “minor to moderate impacts” on the flora, fauna, physical resources, natural soundscape and wilderness.<sup>29</sup>

The 2003 DBCMP is indicative of the difficulty in judging the extent to which Murie’s wilderness ideals operate at Denali. While there is more discussion of wilderness values than at any other time in the park’s history, there are more compromises every year in protecting these values. The gulf between intent and action may become irreconcilable as the park administration attempts to please everyone.

Without an exceptionally persuasive advocate such as Adolph Murie, it is difficult to manage the park with true wilderness ideals while faced with ongoing pressure for increased access. For a brief period the park closely adhered to Murie’s ideals, but Denali’s management is slowly moving farther away from his vision.

Even though Murie’s ideals have been compromised in park management, his influence is still present. The debates and arguments

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<sup>28</sup> 2003 Backcountry Plan, 29.

<sup>29</sup> 2003 Backcountry Plan, 84-89. All the proposed motorized uses are for newer park and preserve lands only. The original 2 million acre park is designated wilderness with motorized uses not allowed.

that take place at Denali today, both internally and through public involvement, consistently include ideals that Murie newly articulated and last advocated over 30 years ago.

## CONCLUSION

Denali National Park in Alaska substantially owes its stature as Alaska's premier wilderness park to Adolph Murie. More than thirty years after he left the park Murie still affects the management and appreciation of Denali National Park. Viewed in retrospect, Murie's development as a naturalist followed a linear progression from his joy in nature in childhood to his wilderness ideals at McKinley Park as an adult. After following his older brother into wildlife biology, Murie's personal values and academic training in animal ecology prepared him to become an esteemed scientist. His pioneering wildlife studies, as one of the National Park Service's first biologists in the 1930s and 40s, helped park managers and the public to regard all species as essential and equally valuable.

Adolph Murie established his reputation at McKinley with his wolf study. Both the physical presence of wolves at Denali and the attitudes of fascination and respect toward them are results of his study. His study helped establish an ecological approach to wildlife that became accepted policy at Denali and throughout the national park system.

Murie's understanding of the ecology of wolves led him to recommend extending the park's boundaries to better protect the home range of the park's large mammals. He first advocated northern boundary extensions during the mid-1950s; he made the case for its importance in park discussions and formal proposals. In 1980 federal legislation (ANILCA) incorporated and expanded Murie's recommendations when it tripled the park in size. Today the extended northern boundary provides greater protection to park wildlife, especially caribou and wolves.

Murie's strong wilderness ethic inspired him to lead the opposition to construction and development threatening the park's wild integrity in the 1950s and 60s. If all the plans in Mission 66 had become reality, they would have radically changed the character of the park. Murie's activism ensured that the single park road did not become a highway. He also helped keep visible infrastructure at a minimum. Many of the plans Murie spoke out against were dropped, such as a lodge at Savage River, a café and gas station at Wonder Lake, and extensive backcountry trails. Today, human development is at only a few scattered sites along the road corridor. Murie's efforts kept Denali National Park a place where visitors can experience a rugged wilderness area that lacks the visual intrusion of extensive facilities as they travel the park road.

Murie's wilderness advocacy during the Mission 66 era inspired a new consciousness in the park's administration toward wilderness values. The wilderness ethic Murie espoused gave park management a new understanding that the park's wilderness character could be maintained only by keeping the road in its existing state. Thus, in 1972 when McKinley Park was facing the completion of another highway leading to the park, and an expected flood of increased visitation, the park restricted private vehicles and introduced a public bus system.

Providing access to the park interior via buses is one of the most important aspects of protecting wildlife and scenic resources in today's park. Using buses instead of cars reduces the traffic on the road and lowers the road's impact on animal movements and behavior, and increases visitors' chances of seeing wolves, grizzlies, and other animals in their natural environment.

The backcountry management plan in use today has stood the test of time, serving to guide backcountry use in keeping with Murie's ideals since its inception in 1976. It institutionalized the values of self-determination and self-discovery in experiencing the wilderness of Denali.

The park bus system and the park's backcountry management system are the two major components of land and visitor management at Denali today. Both systems remain integral to the protection of resources and to visitors' experience at Denali today and they may provide the most tangible evidence of Adolph Murie's influence on the park.

As a scientist Murie gave the park an ecological approach to wildlife, as a defender of wilderness he gave the park a revised philosophical direction. As an author he enriches countless lives with newfound appreciation for both wildlife and wild places.

Denali National Park is different today because of Murie's legacy. More than thirty years after he left the park for the last time, Murie's voice still speaks for the special value of wilderness at Denali. His ideals continue to inspire individuals and influence management policies at the park. As access and development pressures threaten to incrementally degrade the wilderness values of Denali, Murie remains the park's wilderness conscience.



## REFERENCES

**Government documents**

- Advisory Board on Wildlife Management, A. Starker Leopold Chairman, "Wildlife Management in the National Parks," known as "the Leopold Report," a report to Secretary of the Interior Stuart Udall, 4 March 1963.
- Advisory Committee to the National Park Service on Research of the National Academy of Sciences - National Research Council, William J. Robbins Chairman "A Report by the Advisory Committee to the National Park Service on Research," known as "the Robbins Report," a report to Secretary of the Interior Stuart Udall, 1 August 1963.
- Allaback, Sara. Mission 66 Visitor Centers, the History of a Building Type. Washington, D.C.: U.S. Department of the Interior, 2000.
- Miller, Craig A. and R. Gerald Wright. Visitor Satisfaction with Transportation Services and Wildlife Viewing Opportunities in Denali National Park and Preserve. Idaho Cooperative Fish and Wildlife Research Unit Technical Report. University of Idaho, 1998.
- Mech, L. David. *The Wolves of Isle Royale*. Fauna Series No. 7. Washington, D.C.: United States Government Printing Office, 1966.
- Murie, Adolph. "Comments on Biological Research Program" Memorandum to Regional Director, Region IV, 1962.
- \_\_\_\_\_. "Comments on Mission 66 Plans, and on Policies Pertaining to Mount McKinley National Park" 1956.
- \_\_\_\_\_. "Comments on Tagging of Grizzlies in National Parks" 1962
- \_\_\_\_\_. "A Plea for Idealism in National Parks, A Critique" (10-page critique of the Leopold Report).

----- . "Comments by Adolph Murie on the Proposed Research  
'Investigations of Grizzly Bear in Interior and Arctic Alaska' by  
Frederick C. Dean" December 1960.

----- . *Ecology of the Coyote in Yellowstone*. Fauna Series No. 4.  
Washington, D.C.: United States Government Printing Office, 1940.

----- . *The Wolves of Mount McKinley*. Fauna Series No. 5.  
Washington, D.C.: United States Government Printing Office, 1944.  
Reprint, 1971.

Wright, George M., Joseph S. Dixon, Ben H. Thompson. *Fauna of the  
National Parks of the United States: A Preliminary Survey of Faunal  
Relations in National Parks*, Contributions of Wildlife Survey, Fauna  
Series no. 1. Washington, D.C.: Government Printing Office, 1933.

#### Archival Materials

Alaska and Polar Regions Collections, Elmer E. Rasmuson Library,  
University of Alaska Fairbanks

-Adolph Murie Collection

-Olaus Murie Collection

The American Heritage Center, University of Wyoming, Laramie

-Adolph Murie Collection

-Olaus J. and Margaret Murie Collection

Denali National Park and Preserve Museum

-Adolph Murie Reference File

-Bill Brown Collection

Martin Murie personal collection, North Bangor, New York

The Murie Center Library, Murie Ranch, Moose, Wyoming

#### Interviews by author

Buskirk, Steve, knew Adolph Murie in late 1960s, Mount McKinley National Park's first backcountry manager 1972-76. 19 February 2003, by telephone.

Cole, Wally, managed park hotel 1966-70, knew Adolph Murie in the 1960s, current co-owner of Camp Denali. 3 March 2003, Denali Park, Alaska.

Dean, Fred, retired UAF professor, McKinley Park bear researcher during Murie's era. 30 January 2003, Fairbanks, Alaska.

Murie, Jan, son of Adolph Murie. 21 August 2002, Moose, Wyoming.

Murie, Martin, son of Olaus and Mardy Murie. 23 June 2003, by telephone.

MacLeod, Louise Murie, widow of Adolph Murie, 22 August 2002, Jackson, Wyoming.

Nancarrow, Bill, McKinley Park ranger 1948-1954 and personal friend to Adolph Murie. 6 March 2003, Deneki Lakes, Alaska.

Van Horn, Joe, Denali National Park's wilderness coordinator and backcountry manager, 25-year park employee. 11 February 2003, Denali Park, Alaska.

### Other Interviews

Murie, Adolph. Interview by Herbert Evison, 19 October 1962. Tape transcript in the Adolph Murie Reference Files at Denali National Park and Preserve Museum and Library.

### Periodicals

- Burson, S.L., III, J.L. Belant, K.A. Fortier, and W.C. Tomkiewicz III. "The Effect of Vehicle Traffic on Wildlife in Denali National Park." *Arctic* 53, no. 2 (2000): 146-151.
- Cahalane, Victor H. "The Evolution of Predator Control Policy in the National Parks." *The Journal of Wildlife Management* 3 (1939): 229-237.
- Curry, Peggy Simpson. "Portrait of a Naturalist." *The Living Wilderness* (Summer-Fall 1963): 15-21.
- Dean, Frederick C. "Review: A Naturalist in Alaska, by Adolph Murie." *The Journal of Wildlife Management* 27/2 (April 1963): 308-310.
- DeVoto, Bernard. "Let's Close the National Parks." *Harper's Magazine* 27/124 (October 53): 49-52.
- Dice, Lee R. "The Scientific Value of Predatory Mammals." *Journal of Mammalogy* 6, (February 1925): 25-27.
- Editorial. "Mission 66 Gets Underway." *American Forests* (March 1956): 23, 58-60.
- Editorial. "Some View Concerning the Development of Mount McKinley National Park." *National Parks Magazine* (September, 1963): 18-19, 21.
- Evans, Francis C. "Lee Raymond Dice (1887-1977)." *Journal of Mammalogy* 59 (August 1978): 635-44.

- Glover, James M. "Thinking Like a Wolverine: The Ecological Evolution of Olaus Murie." *Environmental Review* 13 (Fall/Winter 1989): 29-45.
- Kendrick, Gregory D. "An Environmental Spokesman; Olaus J. Murie and a Democratic Defense of Wilderness." *Annals of Wyoming* (Fall 1978): 213-302.
- Murie, Adolph. "Another Look at McKinley Park Sheep." *The Living Wilderness* (December 1946): 1-3.
- \_\_\_\_\_. "Roadbuilding in Mount McKinley National Park." *National Parks Magazine* (July 1965): 4-7.
- Murie, Olaus J. "Boyhood Wilderness." *The Living Wilderness* (March 1942): 30-31.
- \_\_\_\_\_. "Mount McKinley: Wilderness Park of the North." *National Parks Magazine* (April 1963): 4-7.
- Sumner, Lowell. "Biological Research and Management in the National Parks," *The George Wright Forum* (Autumn 1983): 3-27.
- Tilden, Paul M., and Nancy L. Machler. "The Development of Mount McKinley National Park." *National Parks Magazine* (May, 1963): 10-15.
- Wilderness Society. "Olaus J. Murie, 1889-1963." *The Living Wilderness* (Summer-Fall 1963): 3-14.
- Wirth, Conrad L. "Mission 66." *American Forests* (August 1955): 16-17.

#### Unpublished Materials

- Creel, Margaret. "The Murie Collection." Teton Science School, 1987. Murie Center Library.

- Evans, Gail E. H. “*From Myth to Reality: Travel Experiences and Landscape Perceptions in the Shadow of Mount McKinley, Alaska, 1876 – 1938.*” Masters thesis. University of California, Santa Barbara 1987.
- MacLeod, Louise Murie. “Adolph Murie 1899 – 1974.” 7-page typewritten, n.d. AMRF-DENA.
- Rawson, Timothy Mark. “*Alaska’s First Wolf Controversy: Predator and Prey in Mount McKinley National Park, 1930-1953.*” Masters thesis. UAF, 1994.
- Zahniser, Ed. “Sixteenth Summer, A Journal.” 1961. A personal account of the summer of 1961 in Alaska (the Brooks Range and Mt. McKinley National Park) as a family friend of the Muries.

### Books

- Brooks, Paul. *Speaking for Nature, How Literary Naturalists from Henry Thoreau to Rachel Carson Have Shaped America.* Boston: Houghton Mifflin Company, 1980.
- Brown, William E. Denali, *Symbol of the Alaskan Wild: An Illustrated History of the Denali – Mount McKinley Region, Alaska.* Denali National Park: Alaska Natural History Association, 1993.
- Catton, Theodore. *Inhabited Wilderness: Indians, Eskimos, and National Parks in Alaska.* Albuquerque: University of New Mexico Press, 1997.
- Chase, Alston. *Playing God in Yellowstone: The Destruction of America’s First National Park.* New York: Harcourt Brace Jovanovich, 1987.
- Craighead, Charles, and Bonnie Kreps. *Arctic Dance, The Mardy Murie Story.* Portland: Graphic Arts Center Publishing, 2002.

- Darling, F. Frasier, and Noel D. Eichhorn. *Man and Nature in the National Parks: Reflections on Policy*, 2d ed. Washington, D.C.: The Conservation Foundation, 1969.
- Dunlap, Thomas R. *Saving America's Wildlife*. Princeton: Princeton University Press, 1988.
- Everhart, William C. *The National Park Service*. New York: Praeger Publishers, 1972.
- Foresta, Ronald A. *America's National Parks and Their Keepers*. Washington, D.C.: Resources for the Future, 1984.
- Frome, Michael. *Regreening the National Parks*. Tucson: The University of Arizona Press, 1992.
- Glover, James M. *A Wilderness Original, the Life of Bob Marshall*. Seattle: The Mountaineers, 1986.
- Herman, Steven G. *The Naturalist's Field Journal, A Manual of Instruction Based on a System Established by Joseph Grinnell*. Vermillion, South Dakota: Buteo Books, 1986.
- Leopold, Aldo. *Game Management*. New York: Charles Scribner & Sons, 1948.
- Marriott, Paul Daniel. *Saving Historic Roads, Design & Policy Guidelines*. New York: John Wiley & Sons, 1998.
- Mayr, Ernst. *This is Biology; the Science of the Living World*. Cambridge: Harvard University Press, 1997.
- McIntyre, Rick. *A Society of Wolves: National Parks and the Battle over the Wolf* (revised edition). Stillwater, Minnesota: Voyageur Press, 2002.
- Mech, L. David, Layne G. Adams, Thomas J. Meier, John W. Burch, and Bruce W. Dale. *The Wolves of Denali*. Minneapolis: University of Minnesota Press, 1998.

- Meine, Curt. *Aldo Leopold, His Life and Work*. Madison: University of Wisconsin Press, 1988.
- Murie, Adolph. *Following Fox Trails*, University of Michigan Museum of Zoology Miscellaneous Publications No. 32. Ann Arbor: University of Michigan Press, 1936.
- .Birds of Mount McKinley National Park Alaska*. McKinley Park: Mount McKinley Natural History Association, 1963.
- . The Grizzlies of Mount McKinley*. Scientific Monograph Series No. 14. Washington, D.C.: National Park Service of the U.S., 1981. Reprint, Seattle: University of Washington Press, 1985.
- .Mammals From Guatemala and British Honduras*, University of Michigan Museum of Zoology Miscellaneous Publications No. 26. Ann Arbor: University of Michigan Press, 1935.
- . Mammals of Mount McKinley*, 3d ed. National Park Alaska. Anchorage: Alaska National Parks and Monuments Association, 1962.
- . The Moose of Isle Royale*, University of Michigan Museum of Zoology Miscellaneous Publications No. 25. Ann Arbor: University of Michigan Press, 1934.
- . A Naturalist in Alaska*. New York: Devin-Adair Company, 1961.
- Murie, Margaret. *Two in the Far North*. New York: Alfred A. Knopf, 1962. Reprint, Anchorage: Alaska Northwest Books, 1997.
- Murie, Margaret, and Olaus. *Wapiti Wilderness*. New York: Alfred A. Knopf, 1966. Reprint, Boulder: University Press of Colorado, 1985.
- Murie, Olaus J. *Journeys to the Far North*. Palo Alto: American West Publishing Company, 1973.



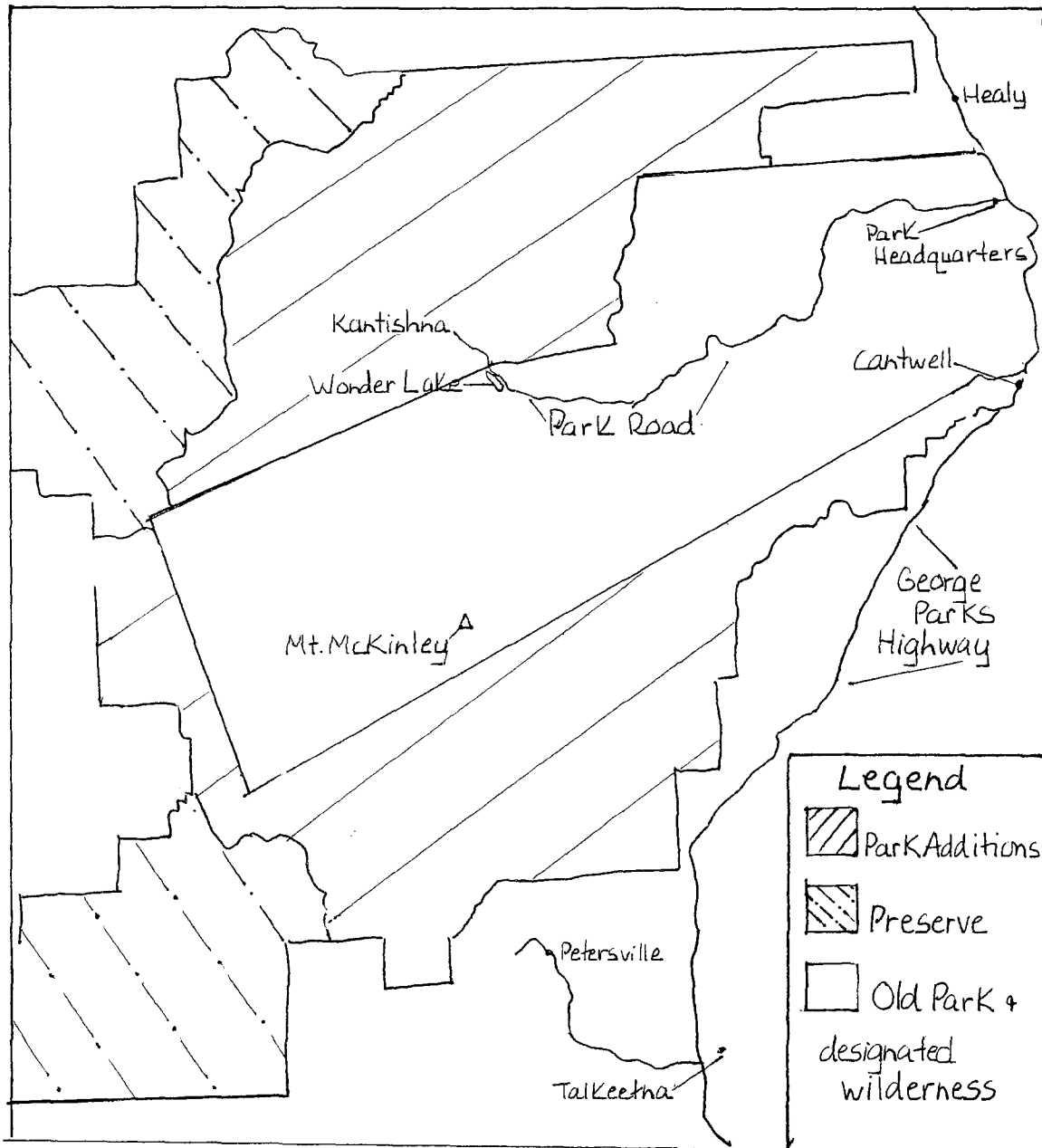
- Nash, Roderick. *Wilderness and the American Mind*, 3d ed. New Haven: Yale University Press, 1982.
- Oelschlaeger, Max. *The Idea of Wilderness*. New Haven: Yale University Press, 1991.
- Rawson, Timothy. *Changing Tracks: Predators and Politics in Alaska's First National Park*. Fairbanks: University of Alaska Press, 2001.
- Runte, Alfred. *National Parks: The American Experience*, 3d ed. Lincoln: University of Nebraska Press, 1997.
- Sellars, Richard West. *Preserving Nature in the National Parks: A History*. New Haven: Yale University Press, 1997.
- Seton, Ernest Thompson. *Two Little Savages*. New York: Grosset & Dunlap, 1903.
- Sterling, Kier B. *Last of the Naturalists: The Career of C. Hart Merriam*. New York: Arno Press, 1977.
- Sutter, Paul S. *Driven Wild, How the Fight against Automobiles Launched the Modern Wilderness Movement*. Seattle: University of Washington Press, 2002.
- Wirth, Conrad L. *Parks, Politics, and the People*. Norman: University of Oklahoma Press, 1980.

#### **Privately Published Materials**

- Meehan, Maggie. *The Murie Ranch*. Moose, Wyoming: The Murie Center, 2001.
- Murie Center. "The Muries, Voices for Wilderness & Wildlife," 2000 Symposium Proceedings. Moose, Wyoming: Murie Center, 2000.

Appendix A

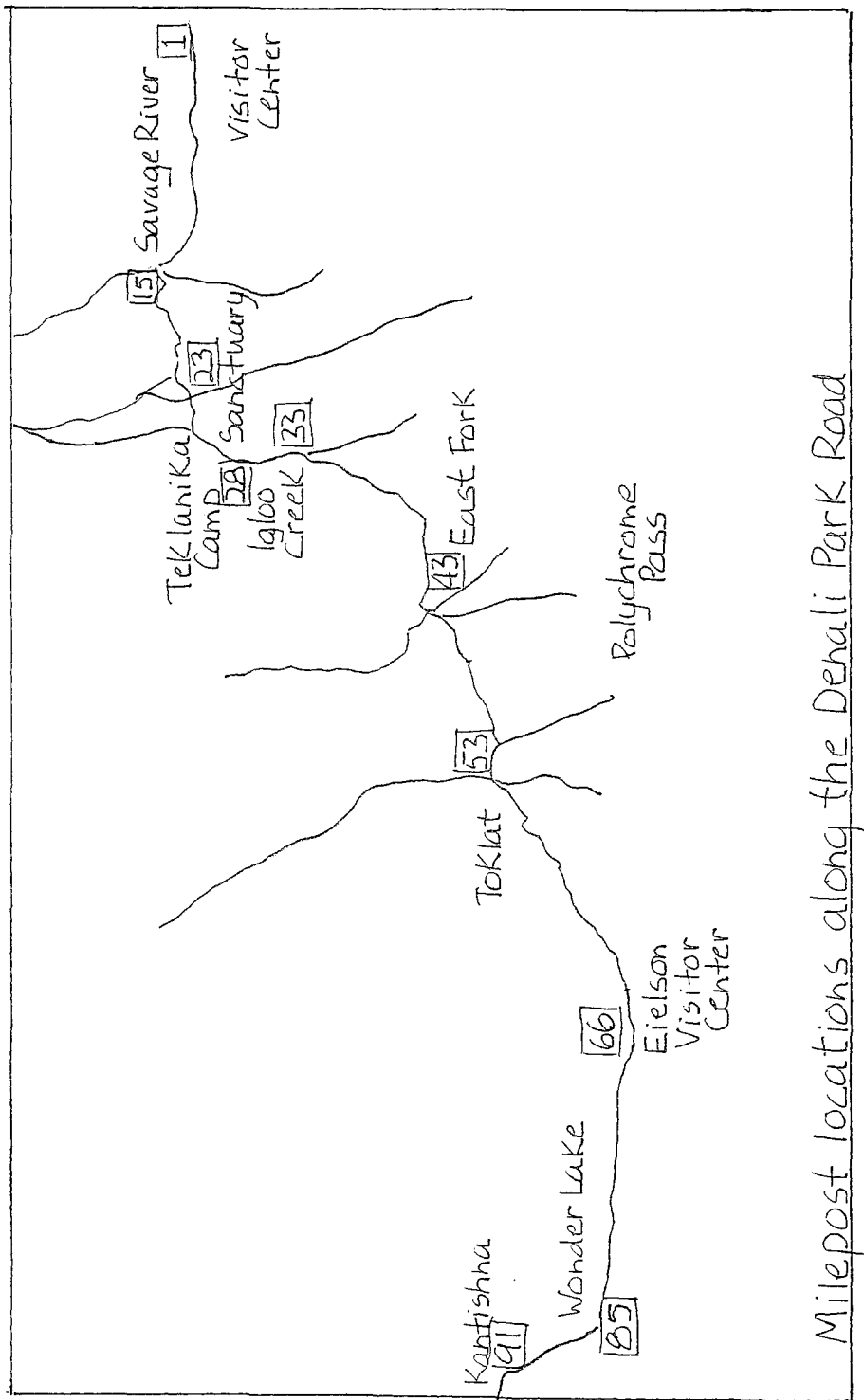
Denali National Park and Preserve Map



Denali National Park and Preserve

Appendix B

Milepost locations along the Denali Park Road



## Appendix C

## Adolph Murie's Publications

*A New Oryzomys from a Pine Ridge in British Honduras*, University of Michigan Museum of Zoology Miscellaneous Publications. Ann Arbor: University of Michigan Press, June 1932.

*The Ecological Relationship of Two Subspecies of Peromyscus in the Glacier Park Region, Montana*, University of Michigan Museum of Zoology Occasional Papers, no. 270. Ann Arbor: University of Michigan Press, July 1933.

"A Five-legged Rabbit." *Journal of Mammalogy* 15, no. 2 (May 1934).  
*The Moose of Isle Royale*, University of Michigan Museum of Zoology Miscellaneous Publications, no. 25. Ann Arbor: University of Michigan Press, July 1934.

*Mammals From Guatemala and British Honduras*, University of Michigan Museum of Zoology Miscellaneous Publications, no. 26. Ann Arbor: University of Michigan Press, July 1935.

"Some Feeding Habits of the Western Sandpiper." *The Condor* 37 (September/October 1935).

*Following Fox Trails* University of Michigan Museum of Zoology Miscellaneous Publications, no. 32. Ann Arbor: University of Michigan Press, August 1936.

"Some Food Habits of the Black Bear." *Journal of Mammalogy* 18, no. 2 (May 1937).

*Ecology of the Coyote in Yellowstone*. Fauna Series No. 4. Washington, D.C.: United States Government Printing Office, 1940.

"The Wilds Where the Caribou Roam." *Audubon Magazine* (January-February 1942).

*The Wolves of Mount McKinley*. Fauna Series No. 5. Washington, D.C.:

United States Government Printing Office, 1944.

"The Merriam Turkey on the San Carlos Indian Reservation." *Journal of Wildlife Management* 10, no. 4 (October 1946).

"Food Habits of Marten in Jackson Hole, Wyoming." *Journal of Mammalogy* (1946).

"Another Look at McKinley Park Sheep." *The Living Wilderness* (December 1946).

"Cattle on Grizzly Bear Range," *Journal of Wildlife Management* 12, no. 1 (January 1948).

"The Mysterious Mouse," *Audubon Magazine* (July 1948).

"Coyote Food Habits on a Southwestern Cattle Range," *Journal of Mammalogy* 32, no.3 (August 1951).

"Wolverine Trails of Denali," *The Living Wilderness*, no. 39 (Winter 1951-1952).

"Grizzly Mothers in the Alaska Range," *The Living Wilderness*, no. 42 (Autumn 1952).

"Wilderness North," *Pacific Discovery Magazine* VI, no. 3 (May-June 1953).

"Gulls and Mice in McKinley Park," *The Living Wilderness*, no. 60 (Spring 1957).

"Why Teen-Age Grizzlies Leave Home," *National Parks Magazine* 33, no. 141 (June 1959).

"Birds and Beasts in the Far North Wilderness," *Westways Magazine* 52, no. 4 (April 1960).

*A Naturalist in Alaska* (New York: Devin-Adair Company, 1961)

"Coyote," *Naturalist Magazine*, *Natural History Society of Minnesota* 10, no. 2 (1962).

*Mammals of Mount McKinley National Park Alaska* (McKinley Park: Alaska National Parks and Monuments Association: 1962).

“Roadbuilding in Mount McKinley National Park,” *National Parks Magazine* (July 1965).

“Pesticide Program in Grand Teton National Park,” *National Parks Magazine* (June 1966).

Publications co-authored with Olaus J. Murie:

“Travels of *Peromyscus*.” *Journal of Mammalogy* 12, no. 3 (1931).

“Further Notes on Travels of *Peromyscus*.” *Journal of Mammalogy* 13, no. 1 (February 1932).